mental health digest

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mhd

cover story

The Facies of Depression

Many writers and clinicians have commented on the facial expression characteristic of the deeply depressed patient. It is a picture, not merely of sadness or resignation, but of misery and desolation. Depression is one of the most serious and debilitating of the mental illnesses, and there seems to be some evidence that it is increasing. Indeed, the authors of one article digested in this issue wonder if we may be in for an era of "epidemic depression."

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Current Concepts of Depression: The Sociocultural

JOHN J. SCHWAB, JUDITH M. BROWN, CHARLES E. HOLZER, AND MARILYN SOKOLOF

Although interest in the sociology of mental illness is a late development, it has antecedents. The great physicians understood the relevance of social influences to illness, and the public health movement of the 19th Century showed that these influences could be directed so that they benefitted the state. Psychiatry's involvement has lagged; as psychiatry justified its existence as a medical specialty, it adhered to a medical model, focusing on phenomenological aspects of psychopathology and searching for anatomical lesions. Also, the sociology of mental illness was neglected because the tools of psychoanalysis dealt with the intrapsychic.

To see man in his whole ecological field is part of psychiatry's task; psychiatry's development did not depend on a new technology but arose as part of a more humanistic vision of man and his social order.

Frequency of Depression

Reports of the frequency of depression range from 4 percent in Scandinavia to 24 percent in the Midtown Manhattan Study. In general hospitals it varies from 11 percent to 20 percent. Among patients seen by psychiatrists in a New York hospital, 28 percent were depressed. Researchers must determine whether the frequency of depression is increasing or decreasing and ascertain the effects of cultural influences on incidence.

Age As Related to Depression

It has been thought that depressions occur more frequently among older persons. Recent studies show that depressions occur in all age groups and are not infrequent in young adults. The peak years for reactive depressions are between the ages of 26–40, and for endogenous depression, 45–60.

Newer studies are emphasizing the age-related qualities of depressive syndromes, with discussions of "childhood depressions"; the "Old Soldier Syndrome" in men in their forties; and, in addition to involutional melancholia, there is an "Empty Nest Syndrome" in middle-aged women. In children and adolescents who attempt suicide, the depression is dominated by schizophrenic qualities.

The incidence of depression in the elderly is probably great, mainly because it is confused with senile deterioration and cerebral arteriosclerosis. Also, depression in the senium is mild and fluctuating, often lacking the typical symptoms of guilt and self-reproach; instead it is characterized by loneliness and a preoccupation with physical illness.

Sex As Related to Depression

Depressions are about twice as common in females. The literature has focused on the plight of women

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during menopause, but new studies reveal that the peak years for women with reactive depression are earlier than for men, and occur prior to the menopause. For endogenous depression, the peak for women is concurrent with the menopause, but for men it appears later.

In our study with medical inpatients, only slightly more females than males were depressed. We also found definite sex-related profiles of depression. The females tended to somatize; in males the symptoms were referable to personal despair, a syndrome not ordinarily elicited during the conventional medical work-up.

Race As Related to Depression

Only a few American studies discuss race and depression. An 1895 study notes that melancholia is comparatively rare in Negroes. In other research, only five of 59 depressed patients were Negroes, and all were manic-depressives. A recent study reports that the incidence of severe depression is much lower in Southern Negroes than in Northern Negroes or Caucasians of both regions.

In this country we should be mindful of the likely discrepancy between actual and reported rates of depressive illness for minority groups. For many reasons, the minority individual may deem himself unsuited for mental health treatment.

Marital Status As Related to Depression

Studies indicate that depression, unlike other mental illnesses (chiefly schizophrenia), is more frequent in the married. There are several explanations: depression is a self-limited or cyclic disorder which is seldom totally incapacitating early in life; by its nature, depression is less offensive to society—the afflicted person bears the brunt of the illness; depression is often a reaction to loss, and losses are more common in later life.

Class As Related to Depression

Class studies are all recent. One found that neurotic depression is twice as common in the two upper classes as in the lower, but that psychotic depressions were 2½ times greater in the lower. However, of the depressed group in the Midtown Manhattan Study, three times as many were in the lower as in the upper group.

In our study of medical inpatients, we found that the frequency of depression in each class differed according to the measure used for assessment. The physicians diagnosed depression four times more frequently in the upper class than in the lower. But both the Beck Depression Inventory and the Hamilton Rating Scale, developed from work with lower class patients, found depression most frequently in the lower. Because physicians usually derive from or achieve high social status, their social distance from the more disadvantaged may limit their ability to recognize depressive symptomatology in the lower-class patients.

In our lower class, the affective symptoms suggested the mode of lower class living itself. The depressed became distinguishable when the class condition was exaggerated to a pathological degree, and a pervasive sense of futility was present. The reported criminal activity in the lower class reflects the outward expressions of hostility and aggression. If there is an inverse relationship between criminal

behavior and depression, we wonder whether those lower-class persons who do become depressed are the ones who cannot externalize their aggression and instead are self-punitive.

The diagnosis of depression may be obscured by the class condition. Not only did our physicians diagnose depression more frequently in the upper class, but on a unit where psychiatric consultations are available to all patients, only 17 percent of the depressed lower-class patients were referred in contrast to 33 percent in the middle, and 100 percent in the upper. Lower-class patients may feel discomfort in a milieu in which their disadvantages are so obvious (financial investigations, the sterility and whiteness of the hospital). These persons often respond to hospitalization with humble compliance, a quality unlikely to elicit concern about an emotional disorder.

Sociocultural factors influence and may determine types of treatment. A subcultural trait, for example, stoicism which minimizes emotional expression, may influence the effectiveness of drugs. Whether the therapy be drugs, resocialization, or analysis, greater attention to demographic and sociocultural factors should enable the clinician to maximize his efforts.

We must expand our concepts of depression to include extramedical considerations. To treat the whole person, one must appreciate the social field in which the patient lives. Particularly for depression, we can expect the manifestations to be partially shaped by behavioral patterns which are demographic and class specific. Our present era is termed the age of anxiety; we wonder whether epidemic depression will be characteristic of the next.

With these trends in mind, mental health should be viewed, at least in part, as dependent upon social engineering. It is here that uneasiness arises about the location of the borders of psychiatry as a discipline. In the last 10 years we have seen that the multidisciplinary approach is an antidote to overspecialization. Most large hospitals and university departments of psychiatry have some contact with psychologists, sociologists, and in some instances, anthropologists and specialists in communication theory. Their conjoint efforts acknowledge that disease is an event occurring in a total field of human experience and reflect tacit agreement that the prevention and cure of disease is not the sole province of the physician.

As medical specialists, some of our responsibilities are pressing. We must: endeavor to specify more rigorously the types of depression we see; join with other disciplines to perfect definitions of class and social milieu in order to ascertain how these bear on the recognition and treatment of depression; learn to distinguish depression from sociocultural conditions (e.g., it would be inappropriate to treat the apparent depression of the aged rural Southern Negro when this depression is really an adaptive social gesture); and, openly examine our attempts at social engineering in the light of the medical and humane arts.

Depression as Viewed Through Neurologic Spectacles

CHARLES F. NICOL

Depression occurs frequently with disease of the central nervous system and is often overlooked or discounted with frustrating and, at times, disastrous results for the patient. The clinician, overseeing the care of patients with neurologic disease, must be alert to depressive illness when it occurs and be familiar with conditions that mimic it.

Depression, particularly the reactive form, accompanies organic central nervous system and neuromuscular disease. An unfavorable prognosis often makes it necessary for the physician sufficiently to disguise his diagnosis so as to avoid precipitating a reactive depression.

The depression associated with epilepsy differs somewhat from other depressive illnesses in that, like epilepsy, it may be of sudden onset, subside in minutes to hours, and rarely terminates in self-destruction. Automatisms and dipsomanic episodes occur and may be distinguished from true psychologic aberrations by the electroencephalographic patterns of temporal lobe or petit mal status epilepticus.

Episodic depression occurs with presenile and senile psychoses though rarely with the former. In the elderly patient rendered senile due to cerebral arteriosclerosis, mood changes are shallow as contrasted with psychogenic depression. Occasionally such emotional fluctuations exhibit a repetitive, stereotyped pattern.

Two diseases that occur together with great frequency are alcoholism and central nervous system syphilis. Depession is present in 7 percent of patients with syphilitic general paresis, a disease not yet eradicated. Alcoholism may either be the result of or result in depression, and when jaundice supervenes the depression is more severe.

Depressive illness rarely occurs in patients with brain tumors, and in such instances may merely serve to bring to the fore a predisposed psychologic abnormality.

Multiple sclerosis is a disease with which euphoria has been classically associated. However, mood changes other than euphoria are commonplace and if it is not appreciated that a depressive mood may characterize the earlier stages of the disease, the correct diagnosis can be missed.

Dysfunction of the pituitary, thyroid, parathyroid, and adrenal glands is capable of producing depression as can the excessive or prolonged use of corticosteroid therapy. Approximately one-third of patients with Cushing's syndrome are depressed. Neoplastic disease, particularly bronchogenic carcinoma of the lung, is corticotropic and may give rise to a Cushingoid syndrome with depression.

The emotional catastrophic reaction with bilateral disease of the corticospinal system can be misinterpreted as depression. Such reactions may be seen in diffuse cerebral arteriosclerosis, general paresis, brain tumor spreading across the corpus callosum, multiple sclerosis, and amyotrophic lateral sclerosis as well as other less common diseases. This is the emotional lability seen

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in the clinical syndrome of pseudobulbar palsy.

Headache is a common complaint of patients with neurologic disease. The headache syndrome is often misinterpreted as a form of depression whereas in reality a large tumor, a subdural hematoma, aqueductal stenosis, or pseudotumor cerebri may be the correct diagnosis. On the other hand, the pain of migraine headache or neuralgias of the fifth or ninth cranial nerves may induce a depression severe enough to end in suicide. Since the pain of both these conditions can now be relieved, and the neuralgias treated surgically, it is imperative that they be recognized and treated adequately.

Disease of the neuromuscular system with its associated weakness as the result of too little or too much circulating thyroid hormone, of alterations of serum potassium, of myasthenia of obscure origin as well as myasthenia associated with neoplasia, infectious disease, and diabetes mellitus may render a previously muscular individual powerless. Reactive depression may occur with these disorders and in some instances be relieved by appropriate therapy.

Head trauma causing the so-called frontal-lobe syndrome resulting in difficulty in concentration, personality reversal, and loss of social graces can be distinguished from depression by finding anosmia, paratonia—a plastic-like tone of the extremities—grasp, sucking, and rooting reflexes.

Drugs able to produce depression must be administered with great caution. The corticosteroids were mentioned. Other depressogenic drugs include the sulphonamides, vitamin B_{12}, the rauwolfia alkaloids, and phenobarbital. Chlorpromazine has a depressent effect, and the other phenothiazine drugs potentiate central nervous system depressants as well as the opiates.

Finally, I wish to make a few observations on the possible relationships between depression, parkinsonism, and catecholamine metabolism. The most consistent pathological change in parkinsonism is the degeneration of the melanin-containing cells of the substantia nigra and it is more widespread in the postencephalitic than in the idiopathic form.

Dopamine, the metabolic precursor of norepinephrine, is almost absent in the striatum and substantia nigra of human parkinsonian brains. Normally, these two areas, plus the globus pallidus, contain most of the brain dopamine. The hypotensive drug, reserpine, is able to deplete extrapyramidal centers of dopamine, induce clinical parkinsonism, and produce severe depression. Conversely, DOPA can relieve the akinesia and rigidity of parkinsonism as well as counteract the psychological effects of reserpine.

The catechol amine hypothesis of affective disorders states that some if not all depression is associated with an absolute or relative deficiency of brain catechol amines. From these experimental facts and other supportive data it seems unlikely that a mere fortuitous relationship exists between parkinsonism and depression. It is rather surprising that the relationship is not clinically closer.

Notes on a Theory of Depression

DAVID L. RUBINFINE

Why do some achieve mastery over depressive affect while others succumb to it?

Mutual adaptedness of the infant and his expectable environment (mother) is inadequate; there is always some delay in response to the infant's signals of need tension. As delay is prolonged and tension rises somatic discharges of anxiety occur: restlessness, crying, increased heartbeat, etc. If there is still no response, it is possible to observe the earliest differentiation of aggressive drive expression: the infant's rage.

This rage precedes the signs we associate with depressive withdrawal: loss of muscle tone, immobility, sagging of the facial musculature, and gradual transition to a state of sleep; in other words, helplessness. We may infer that rage goes hand in hand with the experience of prolonged frustration, and that this rage, when it fails to elicit response, results in exhaustion and feelings of helplessness. Here then is the earliest experience of loss which results in the model for the genesis of depressive affect.

Since these experiences are universal we are left with the question: what makes them pathogenic for some and what decides the costumes in which the pathology will emerge? Aggression, in itself, does not provide an answer. Let us add to it sequence, timing, and degree.

If, for example, the primary factor in the pathology is one of sequence, i.e., where experiences of frustration, delay, or intractable pain predominate in the earliest months of life, can we predict the resulting predisposition? Yes, it will almost certainly be a childhood psychosis. We may even predict that if these experiences involve certain functions, they will result in psychosomatic disorders. Later experiences of gratification may conceal such pathology but will not cure it. The same is true of pathology that results from disturbance in timing. If the earliest experiences have been predominantly the normal ones of need satisfaction and there is a premature and too abrupt reversal into pain, frustration, and delay, the result will be a predisposition to depression.

Those illnesses, the predisposition to which is determined in the first year of life, fall into three groups determined by sequence and timing: psychosis, psychosomatic disorder, and depression. As to where psychotic depression fits into this scheme, from my own experience it is more closely related to the sequence type of disturbance and is characterized by evidences of dedifferentiation, such as severe disturbances of reality testing, thought disorders, and fragmentation of ego and object representations.

With these concepts of sequence and timing, the role that aggression plays in the genesis of these disorders becomes obvious. If the earliest experiences are those of prolonged tension, a too early distinction between self and object will be made, and this distinction will be made in a climate where there is a preponderance of aggression. Where the aggressive drive differentiates first, the danger is threatened

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destruction of object and self. The infant can only meet this threat with a limited repertoire of defenses which consist of denial and regression to the undifferentiated phase. The most extreme outcome is infantile autism.

In disturbances of timing, the impact of aggression plays a different role. Initial experiences are those of need satisfaction and the libidinal drive differentiates first, investing the mother-child unity with narcissistic feeling. When sudden and shocklike experiences of prolonged tension initiate aggressive drive, one result is not threatened destruction of self and object but disruption of narcissistic unity. Here too, the infant's defense is regression, but it is a regression to the narcissistic phase and the mechanism of denial is used to block out percepts of the object in order to preserve it, rather than, as in the case of the schizophrenic child, to delete if from experience.

Thus, where the depressive is concerned with restoring past pleasure, the autistic child is concerned with preventing future pain. For the depressive there is hope connected with the object. For the psychotic there is only danger. Is it any wonder, then, that the narcissistic aims of the depressive are so intensely maintained and so impossible to renounce? They are the last outpost, a defensive position taken to ward off investment of the object with aggressive drive and thereby lose it forever.

It is extraordinary when one considers the fragility of the infant's ego and the vicissitudes of the environment not that so many succumb to depressive illness but that so many do not. Even if in the oral developmental phase, the child's needs to be loved are insured, does not the discovery of the self as separate from the object always cause pain and release a flood of aggression? Is there not always a withdrawal on the part of the mother which results in a shocklike experience of frustration and delay? How else would the awareness of separateness dawn on the infant?

If the distinction between self and object is the result of a failure of the environment, that failure must always be traumatic. There must always be a reversal of climate and withdrawal by the object. And this leads to one of two conclusions. First, that every mother who successfully achieves an awareness of separateness has done an about-face and withdrawn from her infant because of some genetic determinant that assures adaptation, or, second, that all incidents of withdrawal by the mother, including a bad mood or minor illness, are possible instigators of a traumatic perception of separateness.

The first is not observable and the second would mean that normal development is dependent on sheer chance. The truth is that normal development allows for very little chance while the genesis of psychopathology contains in it a large element of accident. Logic demands that we take for granted that traumatic experiences involving frustration and delay are not the determinants of the achievement of individuation in normal development, but that such experiences as waiting and delay become important in development when the maturation of consciousness, perception, memory, cognition, thought, etc., make finer discrimination inevitable.

Although the discovery that the mother is a separate being over

whom one does not have omnipotent control is accompanied by some depressive experience, there is continued confidence in the loving characteristics of the object which makes it possible to continue to invest the object with good feeling. For there is a recompense: the recompense provided by the pleasure of the mother when the child recognizes her as special. It is a recognition to which she usually responds by giving even more. A mother's pride and excitement when she is perceived as separate and recognized as "mother" is a well-known and observable phenomenon. Phone calls are made, neighbors called in, and the die is cast. The mother has rewarded the recognition of love and a new relationship has begun. A developmental step rather than a regressive one has been taken.

If this earliest period is negotiated successfully, severe depression is unlikely later in life. Where there is traumatic experience and fixation to the state of narcissistic unity, regression to this state will take place whenever pain, delay, or frustration occurs at the hands of the love object.

Let us examine this mechanism in a number of developmental events and contrast it with normal development.

In the earliest anal phase the experience of narcissistic pleasure in the process of excretion and in the product itself requires a corresponding experience of pleasure and gratification in the mother. If mothering the infant is not pleasurable there will be a premature and rigid demand for cleanliness, compliance, and sphincter control either by actual demand or attitude. The demand will be experienced as a disappointment in love and will mobilize aggressive impulses to be defiant, dirty, and hostile. Such impulses are part of anal development and produce in normal children the battle so typical of toilet training. In narcissistically fixated children such combat is too dangerous since there is the threat of object loss. The child defends himself by sharing the aims to be "good, clean, and compliant." However, maturational inadequacies, as well as continuing struggle with aggression, result in "accidents."

The failures and the mother's hostility and withdrawal confront the ego with its incapacity to control drive impulses and to control the love object and depression ensues. Since the depressively predisposed child cannot tolerate confrontation with "bad" qualities in the object, he must deny these qualities and ward off his rage.This is often accomplished by attributing the "bad" qualities to the self. The child identifies himself with his own feces with the unconscious reasoning "if I weren't so dirty my mother would like me."

The depressively predisposed child has already suffered the consequences of the withdrawal of the mother when it could not be related to his behavior or the qualities of his person. If such a withdrawal had not been denied, it would have to have been perceived as a total rejection from which there was no possibility of appeal. Thus, the rejection that occurs at the anal phase can be, for such a child, a relief. It is only a partial rejection and one that permits hope of change, because the child is able to make it into a promise of love if he improves himself. This is the story of the depressive. By making himself "bad" and keeping the object

"good," he maintains hope. In this hope there is the possibility for achieving some degree of future self-esteem.

This is the nuclear struggle of the delinquent child, who acts out the fantasy of being bad so he can preserve the illusion and hope that his mother would love him if he could only be good. Delinquency is often a defense against severe depression.

In children who enter the anal phase without a narcissistic fixation, toilet training may be handled well or badly by the mother. If handled badly, there will be fixations to this stage of development which will find expression in symptoms or character. But since such a child has already formed whole object-representation with both "good" and "bad" qualities, the "bad" aspects of the mother do not threaten object loss nor does the child's aggression directed at the "bad" aspects of the mother threaten such loss. This taming of the instincts is an important step in ego development.

It can be seen in the vicissitudes of the wish for a penis in depressive women. When there is fixation to a narcissistic position, the possession of the penis may be regarded as the key to winning the mother's love. Perception of the unattainability or hopelessness of this wish threatens such a woman with depression. A defense against the depressive state takes the form of phallic, competitive behavior with men. Depression results when the woman is forced to see herself as weaker than or inferior to men, or when she is confronted by evidence of her "castrated" state, e.g., during menstruation.

What I am describing is the phallic phase—with its extreme cathexis of exhibitionistic and sadistic competitive aspirations. The narcissistic needs are those of being admired, to be powerful and victorious. If a child has no experience of being loved for his phallic qualities, he may respond with the development of aggressive and vengeful impulses toward women or suffer later from impotence, but he will not suffer from depressive illness unless he has a narcissistic fixation. In this case he will respond by the regressive revival, for instance, of anal narcissistic aims. He may become self-effacing, inconspicuous, passive, and compliant. Should defeat, ridicule, and withdrawal of love occur in spite of these defenses, a depressive reaction will result.

Although depressive affect wears the disguise of hopelessness, it is never a manifestation of hopelessness. It is designed to touch the object even when the object is not present. This style of winning love is apparent in normal development: the lover who threatens suicide, the friend who confesses with the preface, "You're going to hate me for this," the child who begins, "I've done something terrible," and then sobs so bitterly that the deed and the punishment are forgotten, and the runaway who goes off leaving only a note, are all based on the same principle: "If I suffer enough he will take pity and love me again."

Since normal depression is a signal that brings about renunciation of an aim or an object and leads to a raising or preservation of self-esteem, we may question what the difference is between the genetics of depressive affects and the genetics of guilt feeling. Guilt also becomes a signal experienced by the ego which acts as a guide for action and behavior leading to a renunciation

of an aim or an object and to a feeling of being good, worthwhile, and lovable—in other words, to a preservation or raising of self-esteem.

I believe depressive affect and its control and mastery does converge with and perhaps at one stage of development operates in such a way as to seem indistinguishable from guilt. However, there is a difference. Guilt signals are in response to the threat of eruption of instinctual drive impulses that are experienced as a danger because they could lead to real, achievable, but forbidden satisfaction. Depressive affect is a signal that an aim or aspiration is dangerous not because it is forbidden but because it is unattainable.

Hostility and Depression

ELLIOTT S. GERSHON, MARJORIE CROMER, AND GERALD L. KLERMAN

With the expansion of psychiatry in general hospitals and community mental health programs, a wider range of clinical depressions is being seen by psychiatrists. These developments have widened the concept of depression and indicated the need for more complex formulations of the psychodynamics of depression.

Studies have documented the frequent occurrence among depressed patients of outward-directed hostility manifested as irritability, demanding behavior, and angry outbursts, and described as the relative absence of guilt and self-depreciation in a significant subgrouping of these patients. Psychoanalytic writers have attempted to view depression in terms of ego psychology and emphasized the role of fluctuations in self-esteem in the psychogenesis of depression.

This paper has two purposes: to report observations that in certain individuals depressive episodes are associated with manifest expressions of outward-directed hostility as well as inward-directed hostility; second, to describe statistical methods for analyzing serial observations of patients followed longitudinally throughout their depression.

Most studies of depression have attempted to reconstruct the antecedents of the illness and psychogenesis of symptoms. We focused on the recovery process because this period lends itself to direct clinical observations. We made repeated observations on depressed women, attempting to identify changes in their symptoms and in the intensity and direction of their hostile feelings.

The investigation was carried out on a research ward devoted to clinical and metabolic studies of affective illnesses. The ward admitted only female patients with moderate to severe depressions and excluded those with organic brain disease, schizophrenic symptoms, and cardiovascular or renal diseases. Consecutive patients admitted in a six-month period were screened for inclusion. We required that the patient be able to produce verbal samples of at least 50 words average length and be willing to cooperate.

Condensed with permission from *Psychiatry*, 31 (3) :224–235, 1968.

Our final sample did not include patients who had less than twenty weekdays of observation. Six patients comprised the final sample. The average age was 55 years. The mean length of hospitalization was 77 days.

A rating scale for depression devised by Hamilton was modified and used for assessment. Symptoms rated were depressive mood, guilt, suicide, insomnia, loss of interest, retardation, agitation, anxiety, somatic complaints, hypocondriasis, insight (awareness of being ill and willingness to acknowledge it), and weight loss. From a previous analysis of the revised Hamilton scale on another sample, we developed a scale of five items: depressed mood, guilt, loss of interest, helplessness, and hopelessness. We used this scale as the index of the symptomatic depressed state and call it the Depressive Symptom Scale (DSS).

To measure hostility, we used a modification of scales devised by Gottschalk and associates. The subject is instructed to associate freely out loud for five minutes. The verbal production is recorded, and the written transcript is scored phrase by phrase. Three scales are obtained: Hostility-Out, Hostility-In, and Ambivalent Hostility.

We used multiple observations per individual per week (median of four) and took the weekly mean as typical of that week.

As in clinical descriptions, each patient presents a unique pattern, but regularities may be found which apply overall or to several. With regard to overall regularities, hostility-in was positively correlated with the Depressive Symptom Scale. No consistent relationship was found between hostility-out and the Depressive Symptom Scale.

We were puzzled at the lack of either a positive or negative correlation between the hostility-out score and the DSS score. Closer review of the individual patient scores suggested two patterns of hostility-out, which appear to have psychodynamic implications.

The two groups differ according to the verbal expression of their depressed affect. Clinically these patients were the only ones having prominent hysterical features. When these patients are considered separately from the other four and the mean correlations of the hostility scales with DSS scores for each group are compared, an interesting pattern emerges. The Hostility-Out Scale is the only score on which there is a significant difference between the mean correlations for the two groups of patients, with the two patients with hysterical features having a mean correlation significantly higher than the four others.

These findings indicate that the two patterns of hostility and depression obscured each other in the pooled correlations. In both patterns high hostility-in is associated with clinical depression. However, in the pattern which was found in patients with hysterical personalities, hostility-out increases with deepening depression and subsides with improvement in depression. In the second pattern, which occurred in women with many obsessive features, there is no demonstrable relation or a low negative relation of hostility-out to clinically evident affect. It is the verbal expression of affect, rather than the clinical severity of the illness, which differentiates our two groups.

The confirmation or refutation of hypotheses, such as the hostility-depression hypothesis studied in this

paper, has proved difficult, because there are no explicit rules of implication and no "critical test" in psychoanalytic theory.

Only limited attempts have been made to generate and test psychoanalytic hypotheses in settings other than the psychoanalytic therapy situation. A scientific theory that depends on only one method of data-gathering has limited generalizability; one cannot judge the extent to which the theory applies to psychological phenomena in general as well as to the methods of psychoanalysis.

Resistance to Suppression by Dexamethasone of Plasma 11–O.H.C.S. Levels in Severe Depressive Illness

B. J. Carroll, F. I. R. Martin, and Brian Davies

Evidence suggestive of increased adrenocortical activity in depression has been widely reported. The midnight dexamethasone suppression test has been used in the assessment of patients with clinical evidence of adrenocortical overactivity to define normal feedback control.

Twenty-seven patients were studied. These were typical melancholic patients with agitation, retardation, and delusional and suicidal thoughts as well as disturbance of sleep, appetite, and bowel function.

On the patients' admission, clinical ratings were made of the depressed mood, agitation, anxiety, retardation, anorexia, difficulty in concentrating, fatigue, and tiredness.

For comparison, 22 others admitted to the wards were studied. None had significant depressive symptoms.

Tests were repeated on 14 of the depressed patients when they had recovered, just before discharge from the hospital.

Blood for plasma 11-hydroxycorticosteroid (11-O.H.C.S.) estimations was collected in tubes containing 15 units of lithium heparin per 10 ml. of blood. Samples were collected at 8:30 A.M. and 4:30 P.M. Dexamethasone phosphate 2 mg. was given orally at midnight, and a further plasma 11-O.H.C.S. sample was taken at 8:30 A.M. the next day.

In diurnal plasma 11-O.H.C.S. levels there were no differences in the 8:30 A.M. levels in the three groups of patients, and all groups showed a diurnal variation. The recovered depressives had a significantly lower level at 4:30 P.M. compared with their own levels on admission.

The mean 11-O.H.C.S. levels (μg./100 ml.) at 8:30 A.M. after a midnight dose of 2 mg. dexamethasone phosphate were: 13.1 in the 27 depressed patients, 5.3 in the 14 recovered depressives, and 4.8 in 22 nondepressed patients. The difference between the nondepressed and depressed patients is significant.

The age, sex, length of time of symptoms before admission, and severity of individual symptoms did not correlate with dexamethasone resistance.

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These results show that the midnight dexamethasone suppression test discriminates between depressed and nondepressed patients who have identical basal morning and evening plasma 11-O.H.C.S. levels. This approach highlights the inadequacy of single estimations of plasma levels of 11-O.H.C.S. as an index of pituitary-adrenal function.

The results show that the failure of plasma 11-O.H.C.S. to suppress with dexamethasone may not be diagnostic of adrenocortical hyperplasia if the patient is severely depressed. They also indicate the need for further definition of hypothalamic-pituitary function in depressive illness.

Supportive Therapy for the Depressed College Student

RUTH BRILL GROSS

One common and difficult problem facing a counselor or therapist in a college counseling service is the depressed student. The picture is one of misery, immobilization, and a sense of perplexity in the face of what appears to be an overwhelming situation. Often the student has cut classes but is unable to say why. He may complain of not being able to think clearly or to make decisions. Often there are signs of anxiety; sometimes there is a slowing down of functioning, and the interviewer feels that he must "pull" information from his client.

Often, there is excess in one direction or another: not being able to sleep, sleeping 10 to 14 hours each day; not eating at all, eating (or drinking) almost constantly; complete isolation from others, not leaving the company of others. Some clients give an impression of holding in pent-up anger. Others are helpless, clinging, passive. With many, tears are just beneath the surface; with others, crying seems impossible. With some students, depression is difficult to discern because it is masked by a facade of intellectualization and adequacy.

Whatever the outward symptomatic manifestations, the student is not able to solve problems or adapt to the demands of reality; the ego functions of self-initiative, self-regulation, and control are wholly or in part not available to him.

The therapist may be as perplexed as his client since the external situation often appears impossible to set straight and the client seems defiant in his hopelessness and immobility. Something has to be done quickly since a continuation will lead to a worsening of the external situation and the depression.

This means that the therapist may have to focus on the "here and now," interpret reality, point out, impunitively, what the student may or may not be doing, list and assess alternative courses of action, interpret behavior of others in a concrete and phenomenological way, direct the interview, if necessary, and "push" the client into action.

The first step is the initial interview. Although it may be difficult,

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the student should be kept talking with a view to exploring his general situation. The therapist would do well to be kind but firm (perhaps expectantly demanding), as he must become the client's "borrowed ego" for a time. Clients usually can be kept talking if the therapist recognizes their difficulty and guides the interview with short, direct, pertinent questions. The talking is often tension-relieving; it may demonstrate to the student that he can think and talk (with the therapist's help) better than he thought be could; perhaps most important, talking is action.

The interview can be limited to two concrete and specific areas: school and the depression. It is helpful to point out that the client is depressed and that the depression is cause for much of his present difficulty; hence, relieving the depression is the first task and other problems and decisions except school can wait. The first decision for the client is whether to work with the therapist in fighting the depression. Often this is more implicit than explicit, but it may be therapeutic to make it quite explicit. In doing this, the client demonstrates that he is capable of making a decision and can commit himself to action, in spite of his miserable feelings.

Usually the first assignment is the contacting of the instructors to see whether work can be made up or whether the student should withdraw. Often the situation is not so bad as feared, and there is reason for hope. If the student decides to withdraw, the pressure from school is relieved and the student has taken direct action relative to his problem.

The remainder of the assignments might go something like this:

Having the student go "home" and clean his room; this activity is physical, concrete, and gives quick reinforcement in terms of results for effort expended.

Setting up a compulsive daily schedule; the schedule helps the client reestablish a sense of subjective time and provides for getting work and assignments done and so reduces guilt feelings and the sense of powerlessness.

Prescribing vigorous daily exercise as part of the schedule (physical, concrete, tension-relieving activity).

Insisting that the client eat regularly and take a milkshake or snack break midmorning and midafternoon; this is oral gratification but can be presented under the guise of the need for energy or stimulation. Regular meals also help to structure the day.

Reasonably reducing the client's sleeping time (while insisting on scheduled time spent on work, activity, exercise, and recreation).

The therapist may have to help organize the client's studies. Study and concentration may be improved by short study sessions, outlining and writing on the material, lecturing to oneself, discussing the material with someone else.

The student may be asked to keep a daily diary or furnish an autobiography. This helps to prime cognitive functioning and demonstrates to the student that he can think. It may also direct his attention to some of his patterns of behavior.

Frequent contact is important, and an appointment every day or every other day may be necessary. Telephone access to the therapist is of extreme importance not only because of the danger of a suicide attempt but because the client needs support when the depression threatens to bog him down. The extent to which the therapist uses these techniques will, of course, depend upon the client's degree of immobilization and the readiness with which the client responds.

After autonomy has been restored, the student and therapist are in a position to collaborate in looking at the more extended and dynamic causes of the depression and how to modify them.

A Study of Association and Linkage of ABO Blood Types and Primary Affective Disorder

VASANTKUMAR L. TANNA AND GEORGE WINOKUR

Demonstration of the association of a genetic marker and primary affective disorder or linkage between a genetic marker and primary affective disorder would provide evidence for a genetic factor in primary affective disorder. Association and linkage are separate processes. Linkage occurs if two genes, each responsible for a separate trait, are on the same chromosome and close enough together that they assort in a dependent fashion. Association occurs when two genetically separate traits have a nonrandom occurrence in a population.

Associations between blood groups as genetic markers and medical illnesses have been established. Attempts at associations have also been made for psychiatric illnesses. This study was undertaken to detect possible linkage and association in primary affective disorder. Only the ABO blood groups were used as genetic markers, but the methods may be used to study any genetic marker.

To select a uniform group with affective disorders, we chose patients whose illnesses had definite onsets and who had "primary" depression or mania. The presence of such symptoms as depressed mood, sleep difficulties, concentration difficulties, and anorexia, or euphoria, flight of ideas, and overactivity was used in the diagnoses.

The first-degree relatives (sibs, parents, and children) who cooperated were interviewed and also tested for blood groups. Some had primary affective disorder themselves and were placed in the primary affective disorder group. The others were considered the controls.

The control group is important in evaluating the question of association, but it is not in itself used for the evaluation of linkage. To assess the possiblity of linkage a different technique was used. Each sib pair in the study was scored as being alike or unlike for blood group and for having primary affective disorder. Entries were made into a chi-square table. If linkage is present, there is an excess of entries in the alike-alike box and the unlike-unlike box.

In evaluations of both the association and the linkage, subgroups were formed out of the total group. Thus, for instance, in the association study we had a subgroup of subjects who had a positive family history of primary affective disorder. Primary affective disorder index cases numbered 65; the subgroup of those with a positive family history contained 55 persons. In

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the linkage study we formed a subgroup of sib pairs in which there was a family history of mania in a first-degree relative. The total sib pairs numbered 157; the subgroups of sib pairs numbered 31.

ABO blood groups were determined using the standard slide method in most cases.

Comparisons between total affective disorder group and the control group revealed no differences. Comparisons between the group that contained affective disorder problems with a family history of affective disorder in a first-degree relative and the control group revealed that type B blood occurred with greater frequency in the former than in the control group. No other comparisons between these two groups were significant.

For each sibship a table was made evaluating the likeness and unlikeness for illness and for blood type.

We found that, compared to controls, B type blood occurs with greater frequency in primary affective disorder patients who have a positive family history of affective disorder in a first-degree relative. There was no difference between primary affective disorder patients taken as a group and the controls. We failed to observe any association with O type blood.

Thus, available evidence is conflicting and difficult to interpret. This does not mean that there may not be any association between blood groups and affective disorders. It may only mean that so far there is insufficient evidence for assuming such an association.

One important problem is the question of a satisfactory control group. It would seem that the most fruitful control group would be one such as we used, namely sibs or family members of primary affective disorder patients. With this kind of control group, it would be reasonable to assume that the percentages of the various blood types would be similar to the percentages in the primary affective disorder patients, except where association may be occurring.

We were not able to demonstrate linkage between the ABO blood system and primary affective disorder, even when divided into various clinical groups. Nevertheless, the method may be used, with any genetic marker, such as various blood groups, the haptoglobins, the gamma globulins, etc. The sib pair method has been used for linkage studies in other medical illnesses. It is particularly valuable when there is no clear knowledge of the kind of genetic transmission. It provides a first approximation of the possibility of linkage.

Other ways of demonstrating linkage may be used. Probably the most valuable would be the accumulation of several complete families in which two or more generations have had primary affective disorder and in which it would be possible to trace the concordance of a specific genetic marker and the psychiatric illness.

If linkage with any of the genetic markers is demonstrated, the genetic causation of affective disorder will be shown. A demonstration of linkage would enable psychiatrists to predict which persons are likely to get affective disorder, and then to examine genetic, metabolic, and psychosocial factors which might prevent a manifestation of the illness. A demonstration

of linkage in certain types of affective disorder would enable psychiatrists to separate patients into more homogeneous groups in order to investigate further the pathogenesis of the conditions.

Concepts of Autism: A Review of Research

MICHAEL RUTTER

There appear to be three groups of psychotic disorders that develop in childhood; these are most easily defined in terms of the age of onset.

There is the variety which begins in early adolescence and appears similar to schizophrenia as we know it in adult life. There is a type which begins at about age 3–5. The child develops normally, then, often after a period of vague illness, loses his speech, becomes incontinent, regresses, and is often overactive. A similar picture may develop after a frank brain-disease and even in cases where there is no brain disease the subsequent course provides evidence of a degenerative condition of the brain. There are a few other psychotic disorders which occur in childhood—for example manic-depressive psychosis and folie a deux.

This paper is concerned with the infantile variety of psychosis. The term is used to refer to children with a *severe* disorder beginning in *infancy* in which the features are "autism," profound abnormalities of language development, ritualistic and compulsive phenomena, and stereotyped mannerisms. "Autism" is a descriptive term for that disturbance in interpersonal relationships shown by an impression of aloofness and distance, lack of interest in people, failure to form enduring relationships, avoidance of eye-to-eye gaze, little variation of facial expression, failure to exhibit feelings or appreciate humor, and lack of sympathy or empathy for other people. These are the characteristics in early childhood; some features are modified or not found in the older child.

Autism as a variety of mental subnormality—There can be no doubt that autistic children function at a mentally subnormal level. But autism cannot be regarded as merely a variety of mental subnormality. Even on standard intelligence tests, ¼–⅓ of autistic children have an IQ in the normal range. Second, the IQ in the autistic child differs according to the intellectual function examined. Children might be above average on some tasks and severely subnormal on others. The autistic child does poorly on verbal tasks or those which require abstract thought or logic, but well on puzzle-type tests such as the block design and object assembly. To some extent the autistic child's poor level of intellectual attainment is related to specific defects in language rather than to a global deficiency of intellect.

Autism as a "type of schizophrenia"—The view that autism is the same condition as adult schizophrenia is based on the observation that in both a difficulty in interpersonal relationships is a key feature; there are also some other similarities in symptomatology.

But the differences between infantile autism and adult schizophrenia are immense. The sex ratio is different. Autism is much commoner in males whereas schizophrenia is about equally common in the two sexes. The social class of

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the parents of autistic children is unlike that of the parents of schizophrenics. A high proportion of the parents of autistic children are of above average intelligence and of superior socioeconomic status. This is not an artifact of referral policies to clinics, as the findings have been confirmed in an epidemiological study of all autistic children in one English county. The social background of schizophrenics is the same as that of the general population. The family history of schizophrenia in the two conditions is discrepant. All major studies of infantile autism have shown that adult schizophrenia is rare in the parents and the brothers and sisters, whereas it is relatively common in the immediate families of schizophrenics. Whereas mental subnormality is a common accompaniment of autism it is much less frequently associated with schizophrenia. The characteristic pattern of IQ subtest scores found with infantile autism is not a feature of schizophrenia. Delusions and hallucinations are common symptoms in schizophrenia; they are rare in autistic children. The course of the two conditions is different. Remissions and relapses are well recognized in schizophrenia but are uncommon in autism.

Some of these differences might be attributed to age of onset, but it is less easy to explain the dissimilarities in sex-ratio, social class, and family history. One can only conclude that the concept of autism as a variety of schizophrenia is probably wrong.

The genetic basis of autism—Many writers have discussed autism in relation to a basic constitutional defect or abnormality.

That autistic children are rarely born to autistic parents is compatible with a genetic hypothesis; few autistic children recover sufficiently to marry and have children, so if the parents possessed the relevant gene it would probably be in a heterozygotic or otherwise modified form. More problematical is the low rate of autism in the brothers and sisters. If the three largest studies are pooled, and if possible as well as definite, cases are included, a rate of about 2 percent is obtained. The rate of autism in the general population was found to be 4–5 per 10,000 so the rate of autism in the sibs is higher than in the general public. But the rate in the sibs is low for a hereditary disorder unless low penetrance of the gene is hypothesized or it is assumed that genetically determined cases of autism form only a small subgroup of autistic disorders, or nongenetic factors exert a powerful modifying influence.

It is possible for a condition to be genetically determined in spite of a very low rate of the disorder in the family, for example, mongolism. So far the studies of chromosomes in autistic children have been negative. Furthermore, there is no evidence which might give rise to the suspicion of a chromosomal abnormality.

The data by no means rule out a genetic basis for autism but neither do they offer much support for such a hypothesis.

Psychogenic origin of autism—Whether or not autism has a psychogenic basis is complicated by the many different psychogenic hypotheses and by the ambiguity and vagueness with which some of them have been expressed.

Autism has been viewed as the child's response to general qualities in his parents' personality, e.g.,

parents of autistic children appear detached, cold, and obsessive. Other workers have found greater variability in parental personality characteristics. The high intellectual and social status of the parents needs to be kept in mind, and it is uncertain whether or not these characteristics are in excess in the academic and professional circles from which the parents are drawn.

Supposing that there may be a characteristic parental personality, it is questionable whether this suggests a psychogenic etiology. What is important is that it is general abnormalities which have been described. If these general abnormalities have caused autism, the sibs would also be autistic, or, at least, show some psychiatric disorder. It is most unlikely that a general abnormality in parental attitudes or behavior has led to autism.

The fact that the sibs are psychiatrically normal would be irrelevant if the parental or family psychopathology was specifically concerned with the child who became autistic. Mothers and fathers often have different attitudes toward their children, and there might be a specific kind of abnormality in the parental behavior toward only one child.

Three objections may be made in relation to the suggestion that these supposed specific parental abnormalities have caused the autism. One, autism is a disorder which is first manifest in early infancy, and it must be a very severe parental abnormality indeed which could cause so quickly a disorder so gross as childhood autism.

The second is that it is possible that the deviant parental behavior may be due to the child's abnormalities rather than the other way round. Many mothers feel that they lack a sense of intimacy and close rapport, and so become detached, ambivalent or guilty.

The third objection concerns the possibility that there is an "organic" variety of autism as well as a "psychogenic" variety. If there are two varieties they should differ in terms of parental or family psychopathology. This seems not to be the case.

Some clinicians have commented that autism may developed after some "stress" such as admission to hospital or birth of a sib. Only a few autistic children show regression; the majority appear abnormal from infancy without there being a significant change at any one point in development, so that it is unlikely that any kind of "stress" can have been a primary etiological influence.

That autism could develop in relation to more prolonged adverse situations in very early infancy is plausible. Delays in language and distortions in social relationships are common consequences of long-term poor-quality institutional care or severe deprivation in the home. It seems improbable that such situations are responsible for the development of infantile autism. These responses to deprivation are different from autism in a number of key respects (for example, obsessive features are rare in institutional children). Second, autistic children rarely have depriving circumstances in their lives.

It remains to consider a view which constitutes the most clearly expressed psychogenic hypothesis. Autism develops as a response to extreme negative feelings shown by the parent—feelings so marked that the child feels without hope, in the

same way as did many inmates of concentration camps. The severity of the child's response is explained in terms of the critical periods in development at which he experiences these situations (the first 6 months when real object relationships begin, at 6–9 months when language and locomotion are beginning, and at 18–24 months when the child starts to shape his relations with the environment). The autistic child's brothers and sisters are not affected because the parental reaction was specific to the one child, and because only the autistic child experienced the rejection at the critical period in development. While it is possible that this hypothesis is correct, no one has demonstrated that autistic children have had these extreme experiences. The evidence seems against the view that autism is psychogenically determined but there are no decisive findings one way or the other.

Autism as the result of faulty conditioning—The view that autism is the result of faulty conditioning is based on the good response of some autistic children to operant conditioning methods of treatment. The history of medicine shows that it is hazardous to argue from the type of therapy which is effective to the nature of the causal process. It is conceivable that autism develops because of faulty conditioning, but there is no evidence for the supposed abnormalities in patterns of environmental reinforcement.

Social withdrawal as the primary defect in autism—It has been suggested that the primary defect is a disturbance in affective contact.

In favor of this view is the fact that abnormalities in social relationships are invariably present in infantile autism (by definition), and the fact that the social difficulties are apparent right from infancy. But it is striking that social withdrawal tends to lessen as the autistic child grows older.

Furthermore, it should be possible to explain the IQ and language defects in terms of social withdrawal. The evidence suggests that social withdrawal cannot account for these symptoms.

First, it has been shown that the IQ of the autistic child is just as stable as in any other child. Also the IQ is a good predictor of the autistic child's intellectual, social, and behavioral adjustment in adolescence and adult life. This is scarcely consonant with the view that the IQ is unreliable in the autistic child and that the autistic child functions at a low IQ level because he is socially withdrawn.

Even more damaging to the social withdrawal theory are the findings in relation to the autistic child's pattern of scores on performance subtests of the Wechsler Intelligence Scales. The autistic child does poorly on picture completion, picture arrangement, and digit symbol, but relatively well on block design and object assembly, the differences between subtests being highly significant. The most likely explanation is to be found in the language component of the subjects.

In contrast, it is difficult to see how current social withdrawal could cause the child to do poorly on three performance subtests and well on two others. There are no grounds for suggesting that a higher level of social interaction (other than in terms of language) is required for, say, picture completion or digit symbol than object assembly. The findings on the Wechsler Intelligence Scales suggest not only that

the autistic child cannot talk, but that he is deficient in basic language skills.

It remains uncertain whether or not autistic children have a primary defect in social relationships. There may be a social handicap but evidence suggests that if there is, it cannot account for the other major symptoms—impairment in intellectual and language function.

Autism as a brain damage syndrome—The main evidence may be summarized as follows:

A picture indistinguishable from infantile autism may develop after brain disease when it occurs in infancy or early childhood; autistic children who have no abnormalities detectable on a neurological examination in early or middle childhood sometimes later develop evidence of organic brain dysfunction; while the occurrence of cognitive, language, and perceptual defects does not necessarily indicate structural pathology of the brain, it does favor some kind of organic brain dysfunction. The alternative explanation is that these defects are functional abnormalities involving delays in maturation.

The main arguments against brain damage are: There is no evidence of brain damage in at least half the cases of autism; all types of brain damage found in association with autism are found in association with nonautistic conditions, so the question remains as to why the same kind of brain damage leads to autism in a few children but not in others.

Much of the crucial evidence is missing. There are no published histopathological studies; EEG studies are inadequate and contradictory; and metabolic investigations are still in their infancy.

Autism as an abnormality of physiological arousal—One hypothesis suggests that the autistic child's failure to respond to sensory stimuli may be due to abnormalities in maintaining a state of normal alertness.

The matter remains undecided as only limited evidence is available. If it is assumed that autistic children are "over-aroused," two issues arise. First, the level of arousal is related to the child's level of maturation or development, and the findings may be due to the low mental age of the children tested. Secondly, the high arousal may have developed as a secondary response rather than as a primary defect.

Autism as a response to language and other perceptual abnormalities—According to this view, the language disorder in autism is the primary abnormality. This abnormality in the development of language is similar to other developmental disorders of language involving defects in comprehension—so-called "developmental receptive aphasia" or "congenital auditory imperception." The impairment may be associated with other perceptual defects, and sometimes these may be the most important in the genesis of autism.

There is now evidence in support of this hypothesis. Retardation of speech development is an almost invariable manifestation in infantile autism, and speech abnormalities are early symptoms and often the first to be observed. In the young child there are three features which require particular mention. The first is the autistic child's often profound lack of response to sounds, reflected in his lack of startle response, nondistractibility, and the frequency with which he

is suspected of deafness. The second is the tendency to echolalia which is a characteristic of three-quarters of those who gain speech. The third is the tendency to reverse pronouns—particularly a confusion of "you" and "I."

Although there are similarities between the language deficit of autistic children and children with developmental language disorders, there are also differences. Echolalia and pronominal reversal are less frequent in the uncomplicated language disorders. Good short-term memory may be more characteristic of autism than of "developmental aphasia." On the other hand, the use of gesture and mime to communicate is rare in autistic children but common in "aphasic" children.

The second piece of evidence is provided by followup studies. Apart from the level of intelligence, language is the most important prognostic factor. The autistic child who is not speaking by age 5 may improve but is unlikely to achieve a normal or near-normal level of social adjustment by adolescence.

The third piece of evidence is the autistic child's pattern of cognitive abilities. Immediate memory is quite good, but scores on all tests involving verbal concepts, abstraction, or symbolization are poor. This failure applies even on tests which do not require speaking.

The fourth piece of evidence is provided by experiments in which coding and immediate recall were tested in autistic, subnormal, and normal children matched for scores on a vocabulary test. Ordinarily, verbal material tends to be remembered in terms of categories or concepts. Autistic children do this significantly less often. Children were also tested for recall of word messages which consisted either of two nonsense phrases or two meaningful sentences. Autistic children were more likely to remember the message regardless of whether or not it made sense. These results suggest a hypothesis in terms of deficits in verbal coding and patterning.

Problems in relation to the language hypothesis could be mentioned and it is clear that it does not provide a complete or even an entirely satisfactory explanation. The nature of the basic language abnormality remains unknown, and the suggestions as to how social withdrawal and other symptoms develop as a response to failure in the comprehension of sounds are speculative. A language hypothesis offers an explanation of the development of infantile autism that seems to account for most of the findings, and further research to confirm or refute these suggestions is indicated.

Yom Kippur, Air France, Dormitory Food, and the Eating Behavior of Obese and Normal Persons

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Studies of eating behavior of obese and normal persons indicate that physiological correlates of food deprivation, such as gastric motility and hypoglycemia, are related to eating and to the experience of hunger in normal-size subjects but unrelated in obese subjects; and external or nonvisceral cues, such as smell, taste, sight of other people eating, passage of time, etc., stimulate eating behavior in obese more than in normal persons. What are implications of these relationships in a nonlaboratory setting, religious fasting, tolerance of institutional food, and effects of time-zone changes on eating behavior?

Who Fasts on Yom Kippur?

For obese subjects the impulse to eat is triggered by an external, food-relevant cue; the impulse to eat for normal individuals appears to be stimulated by physiological cues. If blocking this impulse by doing without food is an irritating or painful state, then where food-relevant external cues are sparse, or, where the individual can distract himself from the cues, the obese person should have an easier time fasting than should normal-sized persons.

The traditional Jew begins his fast on the evening of Yom Kippur and has no food or water for 24 hours. Except when sleeping, he spends his time in prayer in a synagogue. The ritual and the surroundings are devoid of food-relevant cues.

Among contemporary Jews, observance ranges from those who adhere to every detail to those who are vaguely aware of the day. Between these extremes lies every variation of partial observance—people who spend an hour or two in synagogue, who do without meals but sneak a sandwich and a sip of celery tonic, and so on.

A few days after Yom Kippur, a questionnaire was administered to all students in classes in social science and psychology at the City University of New York and at New York University. It was anonymous and designed to learn from Jewish respondents their sex, height, and weight, whether or not they had fasted, how unpleasant they had found the fast, and other information relevant to how religious they were and their experiences during Yom Kippur.

Our analysis was limited to those who gave some indication of being religious. The criterion was simple: "Approximately how many times have you been to synagogue in the last year?" Any Jew who had been to synagogue at least once, for a reason other than a wedding or bar mitzvah, was considered religious. Of 748 questionnaires, 456 were from Jewish respondents (247 men, 209 women); of these, 296 respondents (160 men, 136 women) were religious Jews.

Whether or not a subject fasted was determined by his answer to the question, "Did you attempt to fast last Wednesday for the Yom Kippur holiday?"

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The Metropolitan Life Insurance Company norms for height and weight were used to calculate weight deviations. Subjects were classified obese if their weight deviations were in the top 20 percent of subjects of their sex.

Among fat religious Jews 83.1 percent fasted on Yom Kippur. In comparison, 68.8 percent of normal Jews fasted. Obesity does play a part in determining who fasts on Yom Kippur.

Who Eats Dormitory Food?

The taste or quality of food is an external determinant of eating behavior. As such, food quality should have more of an effect on obese than on nonobese eaters.

At Columbia, students have the option of eating in the university dining halls or in the restaurants and delicatessens surrounding the campus. Student-conducted surveys document dissatisfaction with the dining halls, with complaints about cold food, poor service, stale desserts, etc.

If an undergraduate elects to eat in a dining hall, he may join a prepay food plan at the beginning of the school year. After November 1, the student may cancel his food contract by paying a penalty and the remainder of his money is refunded. Those for whom taste or food quality is important should be most likely to discontinue their contracts; obese students should be more likely to drop out of the food plan than normal students.

The sample was freshmen at Columbia who signed up for the food plan. It was limited to freshmen because they constitute most of the meal-plan subscribers and because the noncommuters are required to live in dormitories. Their decision to leave the plan could not be affected by moving out of the dormitories.

Some 86.5 percent of fat freshmen let their contracts expire as compared with 67.1 percent of normal students.

Adjusting to Time Zone Changes

There are occasions when there is a discrepancy or opposition between external cues relevant to eating and the physiological correlates of food deprivation or satisfaction, for example, being served a gorgeous dessert after a mammoth meal or confronted with some nauseating concoction after starvation. Our line of thought leads to the expectation that the obese will be more affected by the external cue than will the normal subject, that is, he will eat more of the dessert and less of the mess.

Long-distance East-West travel creates such a situation. A flight leaving Paris at 12 noon reaches New York at local time 2 P.M. If the passenger has eaten an early lunch on the plane and no dinner, he is, on arrival, physiologically ready for a full meal but still 4 or 5 hours away from local dinner hours. The obese should have an easier time in this situation than will normal travelers.

Thanks to the Medical Department of Air France we had access to data which permit evaluation of this hypothesis. Air France studied a sample of crew members assigned to transatlantic routes. Crew members eat lunch shortly after takeoff and are not served another meal in flight. They land in North America some 7 hours after their last meal at a time that is past the local lunch hour and before dinner time.

The Air France study was not directly concerned with reports of hunger or eating behavior, but the investigators noted all individuals who volunteered that they "suffered from the discordance between their physiological state and meal time in America."

Because of physical requirements involved in crew selection, there were few really obese people in the sample. Despite this fact, there is a relation between the extent of weight deviation and the likelihood of spontaneously mentioning difficulties in adjusting to the discrepancy between physiological state and local meal times. The more overweight the French flier, the less likely he is to be troubled by this discrepancy.

The implications are unassailable: fasting, fat, French freshmen fly farther for fine food.

Community Mental Health Centers: Some Issues in Their Transition From Concept to Reality

LAWRENCE C. KOLB

Four issues must be resolved by those who are bringing community mental health care centers from hope to reality.

The first is related to the term itself. Does "community mental health center" convey to our patients and their families the services we are offering? There is doubt that "community mental health center" communicates to professionals or laymen the aims of the legislation of 1963. Perhaps we have brought about confusion in the minds of our colleagues, potential patients and their families, and the public by using the nondescriptive term. Perhaps it is a euphemism, designed to avoid the stigma of "mental hospital." Yet our patients and their families are attuned to understand terms that designate illness and the treatment directed toward its relief. Thus they clearly support healing institutions.

The legislation, in defining a community mental health center, is defining a hospital. A center, says the act, is to include five services: inpatient care; outpatient care; partial hospitalization, day care; 24-hour emergency services; and finally, consultation and education for community agencies.

Yet, "community mental health center" conveys nothing of that to the public. Some have the impression that they are centers for social and political action. And those who oppose social change attack the centers, charging that they engage in brainwashing, suppress democratic institutions, or support a variety of totalitarian aims.

Such misconceptions have caused confusion and aroused antipathy, even resistance, to the community mental health centers. True, the battle seems won at the national level, but the turmoil continues in many States and local communities.

Second, is there manpower to meet the goal of a mental health center in each community of 100,000? The question of adequate manpower also generates much emotion. Unless the manpower arguments are resolved rationally, they will impair the services of existing psychiatric facilities as well as compromise services for new ones.

Many professors of psychiatry are concerned about projected staffing patterns. They cannot conceive that enough specialists can be prepared and see the trend as a threat to excellence in education. Some of them state that to teach community psychiatry is to substitute technical training for a basic understanding of personality disorders. Others insist that all who practice community psychiatry must have core training to ensure general competence, and follow that with special training for community work.

Institutions already inadequately staffed fear finding themselves at an even greater disadvantage as they attempt to draw on the limited pool of psychiatric manpower. Private practice psychiatrists wonder about their role and how they can assume some of the local responsibility for their operation.

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The greatest conflicts, doubts, and suspicions occur among the various mental health professions, particularly in regard to psychotherapy. If psychiatrists think only as a group of medical specialists devoted solely to our own interests, our creative potential for achieving the goals of the mental health center concept will be greatly hampered.

At the turn of the century, it was the geniuses in psychiatry who recognized that we needed others besides physicians to carry out various services. From that vision and the support of psychiatrists grew psychiatric social work, psychiatric nursing, and occupational therapy. We fostered clinical psychology. These groups were originated to develop technical assistants for psychiatrists, and all became professions in their own right. A motivating force in these professions is for its members to be recognized as therapists. That appeals to the omnipotent wish we all share—the power of influencing others.

It is in psychotherapy that psychiatrists as leaders and clinicians are most challenged and tested. We are challenged to distinguish between true psychiatric disability and social impairment. We are obliged to distinguish those patients who need our special capacities from those who can be helped by our colleagues in other disciplines.

More than a larger number of mental health professionals, we need functional analyses of diagnostic and therapeutic procedures and of the capacities of different professionals to carry out various treatment procedures. Measures that call for somatic as well as psychological procedures will remain the responsibility of physicians, nurses, and physical therapists. Activity therapies, psychological tests and procedures, and group work may be delegated to other suitably trained professionals, who must be able to recognize symptoms that call for medical intervention.

In planning for the delivery of any service, we must define the ultimate consumer. His number, whereabouts, needs, and expectations about those who will provide service are of great significance. Only with the aid of that information can available manpower be effectively distributed and the necessary facilities built.

Our manpower situation is not desperate. We have that trait said to be peculiarly American—the capacity for ingenious problems-solving. What are the obstacles to solving the manpower problems, particularly the major problems, uneven distribution? Economic structure? Guild identification? Archaic civil-service regulations? Unwillingness to analyze service functions and to provide inservice training to nonprofessional groups? Older institutions may be unable to test new solutions, but new institutions can seek ingenious solutions to the manpower problem.

Third, are we constraining our clinical and service potentials by a rigid definition of "catchment area"?

The idea of catchment area, which was written into the Community Mental Health Centers Act of 1963, is not new. The system has been applied voluntarily by many clinicians in the U.S., and in various parts of Western Europe and the Soviet Union it is ordained by government decree.

In the U.S. increased selectivity by patients, made possible by inexpensive, readily available transporta-

tion, partly negates the boundaries of informal catchment areas. Those who can afford it often seek medical care in distant institutions with high prestige in preference to local facilities less highly regarded.

For most people, high-quality care will best be delivered in local mental health centers. But some patients' rehabilitation may be better brought about if they are not treated in their home communities. Treatment away from home may be desirable for some with paranoid trends or antisocial characteristics. Without the option of receiving treatment elsewhere than in the local neighborhood, some patients encounter paralyzing difficulties that may predetermine failure.

When we consider the complex of administrative districts in urban societies, offering mental health services on the basis of catchment areas becomes even more difficult. Departments of Health have defined health districts, but they may be unrelated to ambulance districts, welfare districts, or police and fire districts. There are innumerable other districts: church parishes, ethnic groupings, and areas that serve as the cluster spots for special high-risk groups such as the skid rows.

The "catchment areas" of general hospitals also present problems. There are natural pathways to recognized health services, along which those living in the immediate vicinity regularly travel. When government agencies set up arbitrary geographic boundaries, such areas often are skewed from the natural patient population of the hospital.

Finally, are there enough psychiatrists to offer leadership to citizens who want to take part in planning and directing their local centers?

In a number of States, legislative action spells out citizen responsibility to participate. Local populations have highly individual attitudes toward facilities to be erected for those termed mentally ill, and local acceptance of a center will be influenced accordingly.

The more disadvantaged the area, the less willing are its residents to keep disturbed individuals at home, and the less likely to be tolerant of the return of a patient who has been admitted to a mental hospital. Much discussion and education are needed before such attitudes are modified.

Many disadvantaged and previously unorganized urban groups have mobilized to express their wishes and opinions, both within the established political framework and through demonstrations. Some demonstrations have caused delay in the development of centers, and even their abandonment. There are several reasons for the dissent from professionally developed plans: wish to control job opportunities; suspicion that disadvantaged groups will not have equal chances for employment; wish to maintain ethnic recognition and identity; general hostility toward what the dissenters feel is a dehumanizing or depriving bureaucracy.

The purpose of the citizen council is to be a bridge between the center and its target population and to serve as a means through which local leaders may be educated about mental health and mental illness.

It is in working with councils that psychiatric leadership faces the greatest challenge. We must discover whether we have the capacity and skill to shape the attitudes, gain

the acceptance, and engage the assistance of community groups.

A psychiatrist in an executive position takes on many responsibilities; for some he is well prepared, for others less well. He is seldom familiar with the organization's total system of functioning, its structure, various occupational goals, layers and lines of authority, communication system, the obstacles to open expression, and, finally, the source of the stability of the organization and capacity for change. There are sources to which a psychiatrist may turn for assistance. Academic courses in administrative and community psychiatry exist, and in some the student works as an administrative assistant to an executive. Service in the armed forces or governmental agencies may bring acquaintance with the organizational and authority patterns of government institutions.

Nevertheless, many psychiatrists are coming to grips with community groups who demand that their wishes about service be met, who insist on serving on boards and enjoying the privilege of offering jobs. Some psychiatrists are working out patterns of collaborating with all community groups.

Let us bear in mind that it was our leadership that conceived and brought into being the legislation for community mental health centers. If we continue to exert our influence, we shall find we have the capacity to help each local community with the development of its mental health services. If the hopes with which the centers were created are to be fulfilled, psychiatrists must concern themselves with the emergent organizational problems of the centers.

Those are the issues to which we must address ourselves frankly and vigorously in these succeeding days.

The Effects of the Establishment of a Community Mental Health Service on Residency Training

ALVIN M. MESNIKOFF

Establishment of a community mental health service—the Washington Heights Community Service of New York State Psychiatric Institute at the Columbia-Presbyterian Medical Center—has markedly affected the training of residents in the Department of Psychiatry at Columbia University.

Traditional Residency Program

Before the establishment of the Washington Heights Service, the program was divided into assignments to cover the field of psychiatry. The first year provided three experiences at Presbyterian Hospital during a six-month period: emergency room, outpatient department, and general hospital consultation-liaison service. The next six months were divided among two-month experiences on the neurology service of Columbia-Presbyterian Hospital, in a large State hospital, and on the acute service and experimental drug service of the Psychiatric Institute.

In the second year, half the residents gained experience on the male inpatient and half on the female inpatient service of the Institute. This training focused on intensive psychotherapy of a small group of inpatients characterized as verbal, intelligent, middle-class young adults, most of whom were diagnosed as schizophrenic. Almost all patients were voluntary and were selected from applicants residing anywhere in New York State. Most had had previous treatment and rarely were there emergency admissions. The theoretical framework was psychoanalytic and psychodynamic.

The third year included administrative, supervisory, and teaching assignments for six months each. Opportunities for research were available during all three years.

Current Residency Program

When the inpatient services were reorganized to provide for a Community Service (CS) and a General Clinical Service (GCS) structured along traditional lines, the second year of the residency program was most affected.

Introduction of the CS caused apprehension among the residents. They valued the intensive experience with a small group of patients. They were concerned about the increased patient population and turnover, need for using a wider range of treatments, and a greater work load.

The Catchment Area and the Patient Population

The catchment area is designated as Health Areas 3 and 4 of the Washington Heights Health District. In 1960 the population of Health Area 3 (22,000) was composed of 1.6 percent Negroes, 5 percent Puerto Ricans, and 93.4 percent whites; the population of Health Area 4 (26,000) was made up of 7.4 percent Negroes, 17 percent Puerto Ricans, and 76 percent whites. It is a residential area of multifamily dwellings and small businesses.

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The difference in the traditional services and the new program is illustrated by the case load, time allocation, type of diagnosis and treatment, and patients' social characteristics. The CS had three times as many admissions as the GCS. Both groups of residents had 22 hours of treatment time per week; but the GCS resident allocated this time to 2–3 intensive 45-minute psychotherapy sessions per patient per week, while the CS resident's time was distributed over a range of activities from brief sessions focusing on medications to milieu therapy as well as intensive psychotherapy.

The CS patients were older. Patients on the CS also represented a wider spectrum of marital situations than those on the GCS, where twice as many were single.

Forty-seven percent of the GCS patients were referred by private psychiatrists as compared with 4 percent of the CS group; 25 percent of those on the GCS came from other hospitals, mostly private, compared with 4 percent of the CS patients, of whom the majority came from public hospitals.

A much larger percentage of the GCS patients were in the upper brackets of education, income, and social class. The GCS had many housewives and students whereas the occupations of the CS patients ranged from unskilled work to lesser executive positions. Twice as many patients on the CS were heads of households.

The CS diagnoses were: 7 percent organic brain syndrome, 9 percent affective psychoses, 55 percent schizophrenia, and 15 percent neuroses. There were no GCS patients in the first two categories, 76 percent in the third, and 9 percent in the fourth. The remaining patients were distributed among other diagnostic groups, e.g., alcoholism, drug addiction, and transient situational disorders.

Continuous Care in the Same Facility and by the Same Staff

To ensure continuous care in and out of the hospital, physical and administrative changes were made in the clinical services of the Institute. Both services now include men and women. The CS facility is located on one floor, permitting continuous care from the acute phase through convalescence; the physical arrangement of the GCS is similar. An 8-bed intensive care unit was constructed on the CS so that a full range of care would be available. This permits treatment of the more disturbed patient but keeps his isolation from the patient group to a minimum and allows him to participate in the treatment program with others who are less disturbed.

The CS is staffed by second-year residents assigned to one of two therapeutic teams, each consisting of a supervising psychiatrist, residents, nurses, social workers, occupational therapists, and trainees from these groups. The newly admitted patient is assigned to a therapeutic team and to a resident and remains with that team through all phases of treatment.

Under the new system the teams have improved their efficiency as they have met the problems presented by community patients. Cohesiveness and interdisciplinary responsibility are enhanced by the patient-staff daily meeting. Emphasis is placed on involving the patients in activities designed to bring to the fore areas of healthy functioning as well as those affected by

psychopathology. Patients take an active part in ward management and administration, including the granting of privileges and passes to their fellow patients.

Since the resident, social worker, and nurse deal with the same patient group, the resident is placed in a leadership position, directing the treatment program and participation of his coworkers. This team endeavor teaches the resident to respect the contributions made possible by his own training and to have a high regard for the contributions of others.

The continuous care of these patients requires exploration of the many means of treating the patient, facilitating his return to the community, helping him remain there, and providing for his subsequent intermittent use of hospital facilities. Continuity of care has been further supported by discouraging the transfer of patients to State hospitals so that constant and repeated efforts will be made to treat the patient in the local community. Thus, the terms "unmotivated" and "uncooperative" are not meaningful in this situation.

The resident's training and competency in psychodynamics, psychopathology, diagnosis, and treatment are constantly put to the test. This appears to be a more difficult task than that which is required of the resident in a traditional program, where he is permitted to be more passive, avoid exposing errors in judgment and technique and avoid the patient when treatment is unsuccessful.

Community Orientation

The unique aspects of the community-oriented comprehensive psychiatric service at Columbia have brought additional benefits, among them the fact that the education of the resident and staff has been enhanced by observations of the life style and adaptive techniques of individuals from a broad cross section of society.

The resident is encouraged to familiarize himself with the community by contacting the agencies and individuals that can aid him in the treatment of his patients. The use of resources begins in the hospital, where one of the most useful services is adult education, such as family-planning and child-care discussion groups, homemaking and consumer education, and job training.

A significant effect of the community orientation has been systematic program planning and evaluation. During the first year it focused on: demographic and psychopathologic characteristics of the population being served, extent to which the mentally ill were actually being cared for through the CS, and extent to which the treatment programs were designed to meet the needs of the population.

Resident Response to the Programs

The attitudes of residents toward the programs were assessed by informal interviews and group discussions. The more action-oriented resident is disposed toward the CS, and the retiring resident prefers a more formal psychotherapeutic structure.

Overall, the residents are oriented toward private practice and part-time teaching. Their concern is with mastering the fundamentals of clinical training, including interviewing, psychodynamics, drugs, and psychotherapy; their preference for the manner in which they attain these goals is changing, and this is

reflected in the requests for second-year assignments. Eight of 11 residents selected the CS, because they wished to obtain a broad and varied experience which includes the opportunity for intensive psychotherapy but extends to a more varied group of patients and treatment programs.

As a result of the experience of the CS, the GCS has undertaken responsibility for a small local area of 15,000 people in order to broaden the experience available to its residents.

Dr. Strangeclass or: How I Stopped Worrying About the Theory and Began Treating the Blue Collar Worker

ROBERT E. GOULD

There has been a long felt awareness that the lower socioeconomic class has not been receiving even minimally adequate mental health care.

In an effort to meet this need, to have the experience of working with individuals rarely seen in practice, and to test our therapeutic methods with a group considered to be poor treatment risks, a Psychoanalytic Institute signed a two-year contract with an Auto Workers' Union whereby psychotherapy was offered to any member of the union volunteering for such help.

The project has been in operation for a year, and 28 individuals have been seen. Four were children and were referred for private treatment or to a clinic, and one was an alcoholic who was referred to Alcoholics Anonymous. Twenty-three were seen as patients. Fifteen have terminated; ten were reported improved; five unimproved. Of the eight patients currently in therapy, three are reported as improved and there has been no report on the other five patients.

The first task was to disseminate information about the program to 4,000 union members. We sent notices to every union member, placed articles in the union newspaper, gave talks at mass rallies, and had informal talks with shop stewards. We expected resistance, prejudice, and lack of interest, but this was not our experience. The union president and the shop stewards informed us that the response was quite favorable. In a short time we had a full complement of patients.

The so-called resistance and antagonism the lower class harbors toward psychotherapy is based on factors which seem reversible. If it is true that organized psychiatry all but outrightly rejected this group, what other course did this population have but to respond in kind as a defense against being rejected?

What caused the positive response of these auto workers? The service was offered in a simple, direct, open manner; the facility was immediately available; the service was voluntary; the overtures came from the psychoanalysts.

Another factor was the union leader's support; in this well-knit, harmonious union, the members have confidence in the union and its leadership. These workers were less embarrassed and secretive about going to a psychoanalyst than are many middle- or upper-class patients. In one case where a worker was in obvious emotional difficulty, three fellow workers accompanied him to the union office in his quest for help. My own patient took another worker to our Institute to see the social worker. These incidents were evidence of a blue collar acceptance of psychiatry that is in contrast to the attitudes with which this class has been identified.

The evidence is clear that there are differences in attitudes, values, goals, and life styles between the lower and upper classes. The working-class individual is more action-

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oriented than verbal; extrospective rather than introspective; problem- and symptom-oriented rather than personality change directed; poorly educated, relatively unimaginative and little given to fantasy, compared with the middle-class person; and his expectation in a doctor-patient relationship is for quicker and more direct results.

By setting aside the classic psychiatric textbooks and our criteria for qualities which constitute a good patient for psychotherapy, we approached our task with the idea that the intrapsychic structures and conflicts and personality development with its deviations cut across class lines, and that the differences in personality types, values, attitudes, and life styles result from sociocultural and economic backgrounds. Modified and new psychotherapeutic measures, adapted to suit the life style and value system of the blue collar worker, are necessary if the therapist is to be effective.

Many studies have shown that there is a high dropout rate among the lower-class patients. The problem appears to lie in the poor rapport established between the therapist and patient and in their different expectations of goals and treatment procedures.

My patient illustrates some of these problems. I asked him how he thought a psychiatrist could help him and he was reluctant to answer. He finally told me he expected "shock," hypnosis, or pills. I explained how talking could be helpful, and gave a number of examples. We talked about this again until I was sure that we were on the same wavelength and that he was not expecting a particular treatment in vain.

The belief that the blue collar worker is a poor candidate for psychotherapy because he lacks verbal skills and capacity for insight through interpretation is an oversimplification. Listen to a blue collar worker who is interested in baseball arguing the merits of one shortstop over another. There is no loss for words, and depending on the extent of his knowledge, he can be persuasive and articulate even though his vocabulary may not be elegant.

The middle- or upper-class patient may speak more freely and with less prompting and direction. This is not the approach to use with the blue collar worker. The therapist should ask specific and concrete questions, and activities or events should be described in detail.

Informality and an easy "give and take" seems the best approach. To maintain a neutral, distant, uninvolved attitude would only reinforce the distance between the lower-class patient and middle-class analyst.

If the therapist has had experiences similar to the patient's, he may relate them as a means of establishing rapport. One cannot, however, "talk down" or affect a style which does not come naturally.

Establishing contact with the patient on a nonverbal level is another distance-reducing maneuver. This may be accomplished in less formal, static structures than the office. Therapy may be conducted standing, leaning, walking, or in bars. In the office, I behave more actively, in a nonverbal manner, than I do with my middle-class patients.

Flexibility can be advantageous. There is no law which states that 50 minutes is the quintessence for a psychotherapeutic session. It may be

more constructive to have a longer session when material is rich and free-flowing, and a shorter one if a session is unproductive.

Role-playing is another technique adapted to the style of the blue collar worker. A concrete and structured framework is established, whereby the roles of the patient and therapist are clearly defined. The inhibiting nature of the formal doctor-patient relationship is broken down and a setting is provided in which the style is physical, down-to-earth, concrete, problem-directed, externally oriented rather than introspective, group-centered.

Education and guidance as a technique should not be underestimated. The patient's education may have been severely limited and his sensitivity and psychological knowledge of others blunted, so that some changes may be effected through judicious use of education and guidance. The lower-class patient is often respectful of authority and may be dependent upon someone who is better educated and trained to offer leadership. The therapist should make use of this dependence to encourage the worker to try new creative roles offering possibilities of reeducational and corrective emotional experience.

The question of how all this activity affects the transference was not crucial in my experience. Although I became more personally involved through revealing my experiences and attitudes to a greater degree than usual, the transference did not become unduly distorted.

I believe we have been too quick to condemn the so-called "symptom cure." Where changes can be made through deep, prolonged, uncovering therapy, this is commendable, but it does not follow that the "symptom cure" is unworthy of time or effort. Freud himself was no starry-eyed visionary. In reply to the question, how much could he help or change the patient, he stated that if he could transform misery into common, everyday unhappiness, this was a worthy undertaking.

I would like to introduce the concept of "the family psychotherapist" as a modality of treatment. Brief therapy may be done with the possibility or expectation that the patient or some member of the family may have to come back. The psychiatrist's function would be analogous to the family doctor who treats an illness and sees the patient again when the same or another sickness develops. The psychiatrist is able to treat many more people for a shorter time, realizing that no far-reaching change has occurred, but that he has improved the living conditions of the patient and his family, to a degree which makes his life happier and, hopefully, more productive.

There is of course an overlapping and blurring of class boundaries and patients' needs; consequently, the modified and new techniques developed for the blue collar worker should, at appropriate times, be effective with all patients. The psychoanalyst who learns to work effectively with patients from the lower socioeconomic group will become a more universal therapist, with increased skills and knowledge, who will operate more effectively with all his patients, from every walk of life.

Aging: The Loss of Temporal Organization

H. V. Samis, Jr.

Aging has concerned man since he realized that it happens to him. Aging is thought of in terms of the psychological, economic, social, and medical problems which it generates. In my view, aging is first a biological problem because it is first a biological phenomenon.

Biological organisms suffer a gradual decline in functional potential with advancing age. This decline is linear and is accompanied by an exponentially increasing probability of death.

As various levels of biological organization have been probed for possible causes of senescence, it has become difficult to discriminate between young and old. Although, with advancing age, organisms show signs of degenerative diseases, this increased incidence is the result of aging, not its cause. On the other hand, the deterioration of form and function, which are the hallmarks of senescence for an integrated biological system, seem to be reflected but slightly in physical or chemical changes at lower levels of organization.

Yet, gerontologists have embraced the hypothesis that organisms age because cells age. Many gerontologists think that cellular aging is the consequence of molecular changes which occur in the biological information system. These changes are thought of as affecting a loss of information or information potential either of random events occurring at the level of the genome or by the programmed expression of "new" and previously masked genetic information deleterious to the system.

We too have been mesmerized by the desire to include aging among the phenomena explainable by changes in the central biological information system. But our attention is now diverted to study of the dynamic dimensions of biological organization.

Rates of biological processes are not constant. They vary not only quantitatively but also cyclically. Some biological rhythms approximate the rhythms of the seasons, others the lunar month and tides, and still others the 24-hour day. The diurnal rhythms have received greatest attention; renal function, enzyme activities, running in rodents, susceptibility to drug action and insecticides, body temperature, bioluminescence, eosinophil counts, and endocrine secretion are examples. These circadian rhythms persist with approximately the same periodicity even in the absence of environmental cues. Under constant environmental conditions, however, all endogenously paced rhythms do not continue with exactly the same period.

Under normal environmental conditions of changing levels of light and temperature, an organism's activities seem to be ordered in time with reference to one another and to the environmental stimuli. These correlations suggest that there are links between environmental pacemakers and the periodic subsystems which characterize organisms. This implies that a constant phase relationship is imposed for some com-

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binations of activities which may be critical to the well-being of the organism.

The advantage to the organism of maintaining temporal coordination among all periodic activities at all levels of organization may be questioned. A relationship between DNA synthesis and mitotic activity in a particular cell is necessary for the completion of that mitotic event. But is it necessary or advantageous that all cells undergo mitosis simultaneously except possibly under acute conditions, such as those resulting from wound or massive liver necrosis? It is conceivable that DNA synthesis and mitosis in different cells are to some degree dependent upon common denominators, such as the availability of substrates or necessary cofactors. In turn, the availability of essential ingredients may depend upon the periodic ingestion, digestion, and assimilation of foodstuffs.

Thus, a process as remote from the environmental diurnal rhythms as mitosis may be indirectly linked to them and internally coordinated with them in time. It is also likely that many interactions are coordinated by common endogenous stimuli, such as the periodic endocrine secretions which regulate cellular processes. When subjected to environmental periodicities such as light and temperature, these endogenous hormonal cues become entrained by the exogenous cues and, in turn, entrain the cellular processes under their control.

It seems likely, therefore, that the characteristics of a living system are the result not only of spatial organization of its components but also of temporal organization of its many processes. It follows that alteration in levels of temporal organization will result in alterations in function.

When maintained in continuous light and at constant temperature, many organisms demonstrate characteristic effects: eclosion in *Drosophila* populations becomes aperiodic, tissue damage develops in tomatoes, and in the mouse running rhythms lengthen and then become increasingly aperiodic. A shift in the phase of many biological functions, such as urine flow, excretion of sodium and potassium, and body temperature, occurs in organisms subjected to inverted or abnormal lighting regimens. These functional phase shifts do not occur immediately nor do they all shift simultaneously. This suggests that they are not irrevocably coupled to one another or to the environmental cues. Rather, they appear to be loosely linked and can be dissociated, resulting in "disphasia." Such alterations could be important in the occurrence of some diseases. It is also plausible to think that they could be important in senescence.

We are justified now in asking: are the deleterious consequences of age due to changes in the organization of things or in the order of processes?

In my judgment, the gradual and progressive loss of functional potential is the result of the loss of coordination among many interdependent oscillating systems. With advancing age, cyclic processes in cells, organs, and systems must become increasingly dissociated in time. This may occur as a consequence of random malfunctions or "events," of a permanent or transitory type, which elicit compensatory responses and result in an internal loss of pacing. Disphasic conditions

in systems are of consequence in aging because even though the instigation of the disphasic incident may be transitory, complete reentrainment of the maverick rhythms does not occur. A slight discrepancy between the incidence of disphasia and compensatory reentrainment assures that the process becomes increasingly randomized in time. This may be the means by which aging organisms lose their functional vigor, capacity to adapt to radical changes in the environment, and ability to survive the stresses of disease and physical insult.

The "aging event" need not be due to a particular type of causative phenomenon. Progressive loss of temporal organization in a complex network of interdependent, but loosely coupled oscillating processes may be a property of the system itself and therefore occur without "cause" in the usual sense of the term. This concept of aging is not necessarily incompatible with current theories of aging, but is instead the addition of another dimension.

Chimpanzee Performance: Computer Analysis of Electroencephalograms

J. Hanley, D. O. Walter, J. M. Rhodes, and W. R. Adey

We have analyzed on a computer EEG data recorded from stereotaxically implanted chimpanzees playing an electronic version of the game of tic-tac-toe (noughts and crosses), and have sought to characterize two different situations by EEG parameters alone, and can do so provided that enough parameters are used. We can also distinguish between correct and incorrect decisions.

The matrix analysis of EEG parameters has been applied successfully to scalp EEG records in performing man. This pattern recognition method was applied to two situations: with the chimpanzee seated not performing, but awaiting his opponent's move; and performing with a response to the opponent's move.

A series of 156 EEG samples was analyzed for the two situations from three chimpanzees. Ten samples for right and wrong decisions were analyzed from a fourth animal. One or two parameters from one or two structures allowed more than 90 percent accuracy in discrimination.

Electrodes were stereotaxically placed in the amygdala, hippocampus, frontocentral and temporoparietal cortical areas, and in the midbrain reticular formation and nucleus centrum medianum. Hippocampal placements were bilateral in all three animals. In the fourth animal, used in the right versus wrong experiment, electrodes were also placed in the left caudate nucleus and the paracentral and left ventral anterior thalamic nucleus.

EEG tape recordings were analyzed in two steps. Variables were first generated by digital spectral analysis, which were then used in the development of a multivariate matrix by stepwise discriminant analysis. Each EEG channel was separated into different frequency bands by digital filtering techniques. Four parameters were selected in each band: sum of spectral densities at each frequency; mean frequency within the band; bandwidth within the band; coherence, which is analogous to the correlation coefficient.

EEG epochs were selected in relation to the animal's touching the response panel. Epochs were 7.0 seconds long, beginning 7 seconds before the response. The computer automatically positioned the digital tape according to the initiation of the response. Postresponse epochs were similarly automatically edited. The analog records were digitized at 200 samples/second.

The chimpanzee was seated at the tic-tac-toe board. This consisted of nine panels in a 3x3x3 array, corresponding to squares which frame the possible zero and plus plays. A light appeared in the top row of the board, signalling the adversary's initial move. The move was registered by the lighting up of two panels.

The animal then responded by touching the adjacent panel, which completed a set of three lit panels

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for a correct decision. Selection of a remote panel constituted an incorrect response. The panel lights were then extinguished and the signal light reappeared, heralding the start of a new game. The chimpanzee was rewarded with food for a correct move. After training, the animals performed close to the 100 percent level with extremely rare errors.

The parameters which distinguished the two situations cannot be seen by ordinary visual analysis of the EEG. They do not merely reflect the focusing of attention; the animal is already intent on the coming move. Nor do they rely on muscle movement artefact: signals from implanted leads are not corrupted by muscle frequencies. The sum of spectra was the only parameter to be selected in all four cases and, in performance, its value increased at the surface and decreased in the depth, thus discriminating between a high percentage of the cases.

We are aware that our sample of incorrect responses is small. We offer only five because this is the largest number of errors committed by one trained animal. Examination of these data allowed discrimination both in the epoch before the response and in the one after. The discriminant analysis of the decision-making aspect of the performance contained the added feature of competing successful variables. Thus, though we found three sets of two parameters which were successful, the last set achieved the best separation.

Because the game included a willed motor act, it is worth noting that although the physiological basis of willed movement still remains uncertain, there is evidence favoring subcortical rather than cortical structures, and the findings emphasize the role of the striatum.

The recognition of EEG patterns that correlate with behavioral states has long been a goal of clinical and research scientists. The success of visual analysis of the record has been limited to situations such as the alpha-blocking phenomenon, the three per second spike and wave characteristic of petit-mal epilepsy, and stages of sleep. Powerful and sensitive computer analysis techniques have expanded those limits and have permitted us to separate visually indistinguishable epochs and, perhaps more importantly, to give further evidence that brain wave phenomena are intimately involved with the state of the organism and are not irrelevant noise.

Attack Elicited by Stimulation of the Thalamus and Adjacent Structures of Cats

M. F. MacDonnell and J. P. Flynn

The diencephalon and adjacent structures of the unrestrained, unanesthetized cat have been explored stereotaxically to determine the areas involved in the elaboration and control of aggressive behavior.

Twenty-seven adult cats provided the data. Nine cats had electrodes implanted in regions of the hypothalamus where stimulation regularly elicited attack. Calibrated guide tubes were also mounted on the skull over regions of the brain to be explored by means of calibrated electrodes lowered through the tubes at a later time. The remaining 18 cats were outfitted with guide tubes, so that the hypothalamic attack points and thalamic points might be selected while the animals were awake.

All 27 cats attacked rats savagely when stimulated in appropriate hypothalamic sites. Deeply anesthetized rats were employed as target for attack.

Each trial consisted of stimulation until the cat bit the rat or stimulation for 30 seconds if attack failed to develop. Attack latency—the interval between onset of stimulation and the first bite—was the measure of attack efficiency.

Attack

Regions giving rise to biting attack were found in much of the hypothalamus. Biting attack could also be elicited from the medial thalamic region. Thalamic attack was preceded by pupillary dilation and piloerection.

The attack pattern was not stereotyped. Its form depended on the target's location and seemed influenced by vision: if the rat was out of the cat's view, gross movements did not occur until the anesthetized rat was pulled into the cat's field of vision.

Loss of vision does not disturb the development of hypothalamic biting attack. This difference between hypothalamic and thalamic attack patterns appears attributable to differences in utilization of visual cues. Stimulation of thalamic attack points produces very little locomotion; stimulation of the sites for hypothalamic biting attack is followed by forward motion with the head held low—a pattern called "stalking attack." The stalking cat covers the observation cage rapidly. When its muzzle contacts the rat, biting is ensured by trigeminal reflexes. The blindfolded cat stimulated in the thalamus attacked vigorously when the rat was placed gently against the muzzle, indicating that the terminal phases of the attack are similar whether aroused from hypothalamus or thalamus.

Combined stimulation of thalamic and hypothalamic attack sites summated to produce attack when stimulation of either site alone was below threshold for attack.

Defense reactions (pupillary dilation, piloerection, hissing, spitting, and growling) were seen during stimulation of the stria terminalis both in the region of the amygdala and in the notch between the cau-

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date nucleus and the thalamus. During stimulation of the stria, cats could be provoked to attack stuffed toy animals thrust at them. Facilitation of hypothalamic attack was obtained in cases where stimulation of the stria alone did not suffice to produce unprovoked attack.

Strong facilitation of hypothalamic biting attack was produced by stimulation of a region of the brachium of the inferior colliculus. By itself, the point did not produce attack, only frantic running.

In order to test the effects of centrally elicited pain on aggressive behavior, electrodes were lowered into the tegmentum and posterior thalamus in one cat until overt behavior suggestive of pain was produced by stimulation: the cat grimaced, cringed, recoiled, and crawled into a corner where it remained with its head pushed into the walls. Stimulation of these points at levels below that required to produce overt responses facilitated subthreshold stimulation of the hypothalamus to produce attack. At stronger levels of stimulation, the flight response from stimulation of the medial lemniscus was dominant; facilitation of subthres hold hypothalamic attack to produce attack did not occur.

At still stronger levels of stimulation of the medial lemniscus alone, this cat did attack the anesthetized rat but in a manner very different from hypothalamic and thalamic attack.

After 15 trials at relatively high levels of stimulation no attack occurred. On the sixteenth trial, the cat attacked the rat after the stimulus had been turned off. This behavior persisted, with savage post-stimulation attack continuing for 5–10 seconds. During these trials the cat approached the rat and gently rested its chin on the rat; immediately on termination of the stimulus, the attack was initiated dramatically and carried on for as many as ten seconds. This behavior appears similar to that of Miller's rats, who learned to fight in order to terminte a noxious stimulus.

Grooming

Coordinated grooming was produced by stimulation of the entopeduncular nucleus and ansa-lenticularis. In the internal capsule dorsal to this region, stimulation produced contralateral head turning. In one cat, stimulation of the entopeduncular nucleus produced head turning but no licking. Combined stimulation of this point with another in the contralateral hypothalamus produced the grooming response: the animal licked its coat and made small, rapid biting movements in the manner of a flea-infested cat.

It is interesting that the nervous activity aroused by stimulation of the one hypothalamic point seemed capable of incorporation into three different behavior patterns: eating, attack, and grooming—all of which involve movements of the jaw and tongue.

Suppression of Attack

A number of points in the midline thalamus produced powerful suppression of hypothalamic attack. Stimulation of thalamic suppression points alone produced mild alerting and momentary interruption of ongoing behavior, crouching and moving away from the target or the observer, and retreating movements without marked crouching. The cats fixated visually on the observer or the rat.

The suppression might be viewed as the results of a competing response—such as would be seen on stimulating the head of the caudate nucleus or the tegmentum of the midbrain. When these latter structures are stimulated the cat is simply drawn off course. In the present situation, the competing response is one in which the cat remains oriented to objects in the field, and its motor patterns are not rigidly fixed. It also differs from the suppression seen by stimulating the amygdala or hippocampus, where there is no overt response even at high intensities, and where the effect is similar to raising the threshold.

With judicious balancing of stimuli to the hypothalamic and thalamic sites, each thalamic point mapped was capable of blocking the attack which would ordinarily follow stimulation of the hypothalamus. It was possible to stroke the cat, who retracted its head and appeared discomfited but made no attempt to attack. Care was taken to avoid touching its jaws.

During stimulation of the medial hypothalamus alone, the cat growled, hissed, and launched itself forcefully at the observer's face which was protected by the Plexiglas cage front. The observer did not provoke the attack. During combined stimulation, the animal crouched mildly and watched the observer. It could not be provoked into an attack by gestures and knocking on the Plexiglas. When the observer opened the cage front and reached out to touch the cat, it ran off to a corner and crouched, watching the observer. When the suppression point was stimulated by itself, there appeared to be no behavioral change.

Two systems which are functionally opposed in their regulation of aggressive behavior appear to be represented contiguously in the thalamus. When stimulated, one of these produces attack; the other effectively suppresses it.

The tissue mediating thalamic attack is compactly arranged around the long axis of the thalamus in the region occupied by the periventricular system of fibers and the midline and medial thalamic nuclei which contribute to it. The question arises as to whether the thalamic attack we have described is the result of intrinsic thalamic activity routed caudally in the periventricular system and the dorsal longitudinal fasciculus, or the result of stimulating fibers originating in the hypothalamus and leaving it for mid-brain distribution by way of this dorsal route, or whether it is due to transsynaptic activation of the hypothalamic areas giving rise to attack through stimulation of ventrally-directed fibers of the periventricular system.

Study of anatomical and physiological evidence leads us to conclude that the first and possibly the third alternatives are involved in the production of attack during thalamic stimulation.

The implication is clear that tissue other than the hypothalamus, in these cases, was responsible for mediation of the attack behavior. None of these conclusions is intended to imply that the hypothalamus is not ordinarily involved in the elaboration of attack behavior.

The thalamic sites producing powerful suppression of hypothalamic attack lie in the path of the inferior thalamic peduncle and

its terminal regions in the dorsomedial and reticular nuclei. The multiplicity of pathways in this area makes it difficult to explain the effects of suppression sites on hypothalamic attack. Several alternative possibilities exist, each of which could conceivably act alone or in combination with others.

Two "New" Disabilities

RALF A. PECKHAM

Vocational rehabilitation agencies have been faced with two genuine, identifiable, and professionally certifiable disabilities—sociogenic retardation, and neurosis—for a long time. By a miminum readjustment, we could establish official sanction of these two disabilities. Sociogenic retardation and sociogenic neurosis have existence, a pathology, a set of symptoms, and avenues of treatment.

Sociogenic retardation suggests a functional retardation in which the genesis is social. It is endemic to the ghetto. Typically, educational retardation, if not illiteracy, is common. Family relationships vary across a spectrum of indifference, brutishness, or perversity.

Sociogenic neurosis attributes the genesis of a neurotic condition to an exceptionally weighted social stimulus. In sociogenic neurosis, it might be presumed that only the very strong would be able to be relatively free of neurotic "taint" arising from a lifetime spent in the ghetto environment.

The symptoms of the sociogenic neurotic are many and characteristic. If his maladjustment is directed against himself, he will yield to surrender, despair, or self-annihilation. He will support himself via low-risk larceny, welfare, or dependency upon friends, mistresses, or relatives. He will seek the consolation of drugs, alcohol, and other escapes; be a passive supporter of the ghetto riot and participant in the looting; will frequently come before the courts and serve time in reformatories and prisons.

The sociogenic neurotic may, conversely, resolve his conflict through attack. He is a somewhat dangerous individual. In a riot, he is typically in the forefront. He may play the role of the manipulator, or a management role such as pimp. He too will be prone to drugs and alcohol. He is a prime contender for a "penal offender" tag.

The "new" rehabilitation processes (post-Watts) are specific for treatment of the sociogenic retardate or neurotic. This type of rehabilitation requires total intervention and a total life reeducation in which agency patience and forebearance are extended as never before. The rehabilitation counselor works with an aide who is a member of the ghetto. This aide locates, persuades, and counsels the ghetto client to leave the tavern, get out of bed, keep his appointments, etc.

The rehabilitation processes of diagnosis and personal adjustment training—using sheltered workshops—may be intensively used with these clients. Facilities staffed with indigenous workers and geared to work processes meaningful to ghetto clients are indispensable.

Ultimately the client may transfer into the community at large, e.g., an industrial job. Here a new breed of employer is beginning to sense a responsibility in providing a new type of job adjustment accommodation without time clocks. Gradually job success coupled with consideration for relapses, weaknesses, and errors should produce a change. If the client "cures," an

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ugly chain has been broken. If nothing happens, the client is removed and tried elsewhere.

I hope that psychiatrists and psychologists will accept the rationale that sociogenic retardation and sociogenic neurosis are identifiable disabilities, and that they will so certify. If these two disabilities are certifiable, I would predict that about 75 percent of unemployed manpower in the ghettos are within the statutory jurisdiction of the Federal-State rehabilitation program.

Psychiatric Research and Its Nursing Problems

M. Katherine Crang

Psychiatric illnesses are becoming increasingly accessible to scientific research.

This research is not easy because it is sensitive to many outside factors and requires careful supervision of patients whose behavior sometimes makes such supervision difficult. Indeed, the requirements of scientific investigation and the clinical demands of a psychiatric ward result in problems. The nursing staff finds itself in the center of these difficulties and in the position of having to find solutions and compromises.

The psychiatric department of the Royal Free Hospital has been involved in various research studies.

These studies include tryptophan load tests in which a carefully measured dose of tryptophan is given by mouth in the morning and urine collected for 12 hours afterwards. This test is preceded by a control period of two 12-hour collections of urine during the previous day. For the whole 36 hours the patient is kept in bed. Thirty-six hours after the dose of tryptophan, another identical dose is given at 8 P.M. and again all urine is collected for 12 hours.

The accuracy of collection of each urine specimen is important and this is left to the nurses. They also administer the tryptophan and see that the patient conforms to the requirements of the test.

The tests are carried out three to four days after each patient's admission. The plan of the research is explained to the patient who is asked if she will cooperate. As the program is not unpleasant, all patients have agreed. Indeed they are pleased to help and enjoy the rest and attention in bed, something which tends to be denied to patients in this age of dynamic group programs!

The days of the test may be varied slightly to suit the ward program. We avoid Thursdays as there is usually an outing on that day. Sometimes a weekend particularly suits the patient for the test: on other occasions she may prefer to go on leave then. We have to consider appointments for special investigations and for visits to other hospital departments and also the timing of the menstrual period in women.

Once the time has been decided upon, the test begins. While most patients look forward to the rest in bed, after a short time boredom often sets in. This has to be dealt with by a chat and encouragement from the nurses.

There are then the problems of bedpans. Some patients do not want to bother the nurses by asking for bedpans and the nurses must be alert to offer them at reasonably frequent intervals.

All the urine passed during a 12-hour collection has to be taken to the correct container. Although the containers are labelled, they are identical in shape and we found that this led to errors, until the bottle in use was placed in a prominent place, while all others were kept separately. The next difficulty is in changing from one collection

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bottle to another at the end of the 12-hour period. With several patients being tested at once and nurses changing duties, this has its hazards. One small error in collection invalidates the whole test, so when a nurse had omitted to change the bottle and continued the collection into the wrong one, we left her to plead with a very understanding and sympathetic patient to agree to start all over again!

The whole test routine is carried out twice, once soon after admission and again on recovery just before discharge. This does not always go according to plan. On one occasion a patient who was improved had to go home to help her husband who had become ill, before the second test could be arranged. She agreed to return one weekend especially to complete the test. Another patient agreed to delay her return home, despite some inconvenience, so that the final test could be fitted in.

The male psychiatric patients are in a general medical ward. The men are more difficult to supervise. Their urine collections, which should be brought to the women's ward that acts as a coordinating center for the research, get taken to the pathological laboratories or even more obscure places by porters who are not familiar with what is required. As a result, full-scale searches have to be carried out and harassed pathology department staff mollified after unsuccessfully trying to understand the purpose of being inundated with large quantities of urine.

Almost without exception the patients cooperate, but despite their best intentions, schizophrenic patients have proved difficult. One patient was too unsettled to stay in bed although, with help and encouragement from the nurses, she was careful in saving urine. Another was so suspicious she was unable to cooperate. In a third case, the urine collections kept disappearing and we never knew whether this was sabotage by the paranoid patient undergoing the test, despite his agreement to it, or one of those nursing confusions that are so difficult to track down. A new start a few days later with increased intensity of supervision to the nurses was a complete success.

In cooperating with research, patience, thought, tact, and more intense effort usually brings its rewards.

Management of Schizophrenia in the Community

H. L. Freeman

Schizophrenia is a disease affecting about one percent of the population. This means that no general practitioner is likely to have many patients of this kind, but the ones he does have present difficult problems. Schizophrenia is not a single syndrome but a group of related conditions with features in common.

The etiology of schizophrenia is unknown, and primary prevention is something beyond the limits of present knowledge. But secondary prevention—minimizing handicaps and avoiding relapses—is possible, particularly in the community setting. Most patients (particularly first admissions) are discharged within two months and often after only a few weeks. So the general practitioner may find his patient back home in a short time—but the responsibility should now be a shared one, and not for the family doctor alone.

Aftercare should begin before the patient leaves the hospital. The general practitioner may be able to visit the patient in the hospital and discuss future management with the clinical team there. Schizophrenia calls for a team approach, different from the doctor-patient relationship that the general practitioner will be used to.

Integrated arrangements are important in schizophrenia because of the nature of the condition. Acute episodes may cause distress to both patient and relatives and require rapid hospital admission. The general practitioner will be the one who has to assess that family care is breaking down. In these circumstances hospital care should be available at all times without administrative barriers or difficulty of communication between different services. But having a bed open for the acute case requires an efficient use of the hospital, so that patients do not remain without a need to do so. This is where the hospital's relationship with community services and general practitioners is essential.

Another aspect of schizophrenia is its tendency to run a relapsing course. Management must be thought of on a long-term basis, with a continuous plan of treatment. This is difficult; in the long run something like a continuous care register will be essential. We have a long way to go before this kind of coordination is achieved, and until such a time general practitioners and other services have to keep an eye on known schizophrenic patients as well as they can.

The third important feature is the likelihood of chronic disability and the need for rehabilitation. Five years after first admission for schizophrenia half the patients will be well to a greater or lesser extent and the other half will be handicapped to some extent. Particularly when it begins in adolescence or early adulthood, the disease may have a crippling effect. Since schizophrenics do not spend long periods in hospitals now, caring for them will mostly fall on relatives. A few who lack or refuse such care may drift into the central, doss-house areas of cities, where they are likely to be involved in alcoholism or petty crime and experience the "revolving-door cycle" of prison and mental hospital.

Family care of the disabled schizophrenic has become difficult with the tendency to smaller families and breaking-up of wider kin-

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ship groups that comes from rehousing. Chronic schizophrenia in a husband or wife may have serious results from loss of earnings or inadequate care of home and children. The general practitioner may have to mobilize help from public services, particularly when local social work is inadequate or when the hospital takes little part in the aftercare of its patients.

Help may be needed mainly as rehabilitation for work or to keep up the domestic structure of the home. The disablement resettlement officer should be consulted. He may be able to arrange for the patient to attend an industrial rehabilitation unit or learn a trade at a Government training center. These facilities are not ideal for schizophrenics, but some benefit. There may be psychiatric rehabilitation in some areas, such as hospital industrial therapy units, day centers, or sheltered workshops. All such services are now inadequate for the size of the problem.

On the domestic side the family may need advice in obtaining financial help from the Ministry of Social Security, and if housework has been neglected the services of a home helper can be valuable. Unofficially these ladies often have a supportive role in the family also. Where there are young children, placing them in a day nursery class may help both children and parents. High emotional involvement between family members is known to have a bad effect on schizophrenics, and where this seems to be happening trouble may be avoided by taking the patient into a psychiatric hostel or supervised lodgings.

If a psychiatric social worker is not available, the general practitioner may be able to get this kind of assistance from a health visitor or district nurse. Here the regular attachment of ancillary workers to the practice will make such assistance more effective.

There is no doubt about the effectiveness of phenothiazine and similar drugs in controlling the acute phases of schizophrenic illness. In the periods of remission some patients will remain well for years without treatment, while others will relapse unless they have medication. There is no way of knowing which category a patient is likely to belong to, or even whether he will continue to follow the same pattern. Those who stay on continuous medication show fewer relapses than those who do not. Therefore every case of schizophrenia should be on long-term medication with supervision; this should be reduced gradually and stopped only after careful consideration.

It is difficult to get people to take continuous medication. This difficulty becomes greater when we are dealing with patients who have personality damage, disturbed family relationships, or bad social conditions. Both general practitioner and mental health service must do their utmost to keep as many patients as possible on drug treatment. Here many problems arise from failure of cooperation between different services. Most psychiatrists know of cases where schizophrenic patients have had their dosages reduced by family doctors to an ineffective level, where the drug has been changed to an inappropriate one, or even when the general practitioner's advice has been "not to get used to taking tablets." The result is disastrous. If a general practitioner feels that there may be indi-

cations for a change, this should be discussed with the psychiatrist, but a social worker or nurse can often be helpful in facilitating the discussions.

Even when all professional parties agree on policy there remains the problem that a high proportion of psychiatric patients fail to take their medication regularly. In some cases relatives can supervise the taking of tablets, but even then it cannot be assumed that the tablets are swallowed. A significant contribution to the solution of this problem has come from the introduction of a long-acting phenothiazine, given by intramuscular injection.

The community care of schizophrenia is in its infancy; the family doctor has a vital role to play in it, and this role can only become more significant.

Clinical and Psychological Effects of Marihuana in Man

ANDREW T. WEIL, NORMAN E. ZINBERG, AND JUDITH M. NELSEN

That valid research on marihuana is almost nonexistent is not accounted for by legislation which restricts legitimate investigations or by public reaction verging on hysteria. A number of obstacles are intrinsic to the study of this drug.

Many pharmacologists dismiss giving marihuana by smoking because the dose cannot be standardized. It is not only possible, but important to administer the drug by smoking because: smoking is the way nearly all Americans take it; subjects may smoke marihuana in such a way that drug dosage is reasonably uniform; standardization of dose is not assured by giving the drug orally; quality of the intoxication is different when marihuana is ingested rather than smoked, and the pharmacological activities of natural hashish (not subjected to combustion) and hashish sublimate (the combustion products) are different.

Until recently, it was difficult to estimate potencies of samples of marihuana by analytical chemistry. We had marihuana assayed spectrophotometrically for THC content. We also feel it is important to have chronic users rate the marihuana, and assayed our material by this method as well.

One deficiency has been absence of placebo treatments, which are essential to this kind of investigation. Our solution was the use of hemp stalks devoid of THC.

It is difficult to predict which psychological tests will be sensitive to the effects of the drug. The tests we selected have been used to evaluate many other psychoactive drugs.

It is necessary to control set and setting. "Set" refers to the subject's psychological expectations of what a drug will do to him in relation to his general personality structure. The total environment in which the drug is taken is the setting. Even a question as simple as, "How do you feel?" contains an element of suggestion that alters the drug-set-setting interaction.

Medical, social, ethical, and legal concerns about the welfare of sub-

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jects are a major problem. Some precautions we took are: All were volunteers. All had psychiatric interviews and were told that they might be asked to smoke marihuana. All subjects were driven home by an experimenter; they agreed not to engage in unusual activity or operate machinery until the next morning and to report any unusual, delayed effects. All agreed to report for followup interviews six months after the experiment. All were protected from legal repercussions in agreements with the Federal Bureau of Narcotics, Office of the Attorney General of Massachusetts, and Massachusetts Bureau of Drug Abuse and Drug Control.

The central group of subjects consisted of nine healthy, male volunteers, aged 21 to 26, all of whom smoked tobacco cigarettes but had never tried marihuana. Eight chronic users of marihuana also participated, both to "assay" the marihuana and to enable the experimenters to standardize the protocol. The age range for users was also 21 to 26 years.

The nine "naive" subjects were selected after careful screening. Only after a prospective subject passed a psychiatric interview was he told that the "psychological experiment" for which he had volunteered was a marihuana study. If he consented to participate, he signed a release, and also agreed to certain conditions, among them that he would "take no psychoactive drugs, including alcohol, other than those drugs administered in the course of the experiment."

It proved extremely difficult to find marihuana-naive persons, and nearly two months were required to obtain nine men. The heavy users of marihuana were obtained with less difficulty. They were interviewed and instructed not to smoke any marihuana on the day of their appointment.

Great effort was made to create a neutral setting. Subjects were made comfortable and secure in a suite of laboratories and offices, but staff avoided encouraging anyone to have an enjoyable experience. Verbal interactions between staff and subjects were minimum and formal. At the end of each session, subjects completed a form asking whether they thought they had smoked marihuana; whether a high dose or a low dose; and how confident they were of their answers. The experimenters completed similar forms on each subject.

Marihuana was supplied by the Federal Bureau of Narcotics. A batch, assayed at 0.9 percent THC, was rated by the chronic users to be "good, average" marihuana. This batch of marihuana was used; the low dose was 0.5 gram, and the high dose was 2.0 grams. Marihuana was administered in the form of cigarettes; each person smoked two cigarettes in succession.

Placebo consisted of chopped outer covering of mature stalks of male hemp plants; it contained no THC. The length to which each cigarette was to be smoked was indicated by an ink line. Marihuana and placebos were administered to the naive subjects in double-blind fashion.

Chronic users were tested on high doses with no practice sessions. Each naive subject was required to come to four sessions, spaced about a week apart. The first was a practice session, in which the subject learned the proper smoking technique and during which he became acquainted with the tests and protocol. One purpose of practice was to eliminate individuals who were not tolerant

to high doses of nicotine, thus reducing the effect of nicotine on the variables measured during subsequent drug sessions. A number of volunteers who said they were cigarette smokers developed acute nicotine reactions when they smoked tobacco cigarettes by the required method. Such a reaction disqualified a subject.

The physiological parameters were heart rate, respiratory rate, pupil size, blood glucose level, and conjunctival vascular state.

The psychological test battery consisted of the Continuous Performance Test; the Digit Symbol Substitution Test; CPT with strobe light distraction; self-rating bipolar mood scale; and pursuit rotor.

At the end of the psychological tests, the subject was left in a room with a tape recorder and instructions to describe "an interesting or dramatic experience" in his life. After exactly 5 minutes he was asked how long he had been in the room. In this way, an estimate of his ability to judge time was obtained.

Safety of Marihuana in Human Volunteers

No adverse marihuana reactions occurred in any subject. Effects were maximum 15 minutes after smoking. They were diminished after 30–60 minutes and dissipated after three hours. With the high dose of marihuana, all chronic users became "high." Only one naive subject had a "marihuana reaction" on the high dose.

The two groups of subjects reacted differently. We must caution that our study allowed rigorous statistical analysis of data from the naive group; it was not designed for formal comparison between chronic and naive users. Therefore, differences must be regarded as trends to be tested by experiments.

No naive subjects were able to identify the taste or smell of marihuana in the experimental cigarettes. Most subjects found the pure marihuana cigarettes (high dose) milder than the low dose or placebo cigarettes, both of which contained tobacco.

There were three outstanding findings: most subjects receiving marihuana in either high or low dose recognized that they were getting a drug; most subjects receiving placebos recognized that they were receiving placebos; most subjects called their high dose a low dose, but none called his low dose a high dose, emphasizing the unimpressiveness of their subjective reactions.

In the naive subjects, marihuana in low dose or high dose was followed by increased heart rate 15 minutes after smoking, but the effect was not demonstrated to be dose-dependent. The high dose caused a greater increase in the heart rates of chronic users than in those of the naive subjects 15 minutes after smoking.

In the naive group, there was no change in respiratory rate. Chronic users showed a small but statistically significant increase, but we do not regard the change as clinically significant.

There was no change in pupil size. Significant reddening of conjunctivae occurred in one of nine subjects receiving placebo, three of nine receiving the low dose of marihuana, and eight of nine receiving the high dose. It occurred in all the chronic users receiving the high dose and was rated as more prominent in them.

There was no change in blood sugar levels.

Performance on the CPT and on the CPT with strobe distraction was unaffected.

Decrements in performance of naive subjects on the Digit Symbol Substitution Test following low and high doses were significant at 15 and 90 minutes after smoking. Chronic users started with good baseline performance and improved slightly on the DSST after smoking 2.0 grams of marihuana, whereas performance of the naive subjects was grossly impaired.

Decrements on pursuit rotor performance in naive subjects after low and high doses were significant at 15 and 90 minutes. This effect on performance followed a dose-response relation at 15 and 90 minutes after the drug was smoked. All chronic users started from good baselines and improved on the pursuit rotor; it is probable that the improvement was largely a practice effect.

Before smoking, all naive subjects estimated the 5-minute verbal sample to be 5 $\pm$ 2 minutes. After placebo, no subject changed his guess. After the low dose, three subjects raised their estimates to 10$\pm$ 2 minutes, and after the high dose, four raised their estimates.

Persons who had never taken marihuana reported few effects like those commonly reported by chronic users. Nonusers reported little euphoria, no distortion of visual or auditory perception, and no confusion. However, several subjects mentioned that "things seemed to take longer."

Our finding that naive subjects did not become subjectively "high" after a high dose of marihuana is interesting when contrasted with the response of regular users who reported and exhibited "highs." It agrees with reports that many people do not become high on their first exposure to marihuana even if they smoke it correctly. A physiological hypothesis suggests that getting high on marihuana occurs after some sort of pharmacological sensitization takes place. A psychosocial interpretation is that repeated exposure to marihuana reduces psychological inhibition, as part of, or as the result of a learning process.

We would like to comment on the fact that marihuana appears to be a relatively mild intoxicant in our studies. It must be remembered that other experimenters have given marihuana orally, doses much higher than those commonly smoked by users, administered potent synthetics, and have not controlled the setting.

The set, both of subjects and experimenters, and the setting must be recognized as critical variables in studies of marihuana. Drug, set, and setting interact to shape the form of a marihuana reaction. The researcher who sets out with prior conviction that hemp is psychotomimetic or a "mild hallucinogen" is likely to confirm his conviction experimentally, but he would probably confirm the opposite hypothesis if his bias were in the opposite direction. Precautions to insure neutrality of set and setting, including use of a double-blind procedure as an absolute minimum, are important if the object of investigation is to measure real marihuana-induced responses.

Mental Health and the Law

Legal Counsel at Commitment Procedures

The United States Tenth Circuit Court of Appeals has held that persons cannot be committed to mental institutions against their will without having been represented by legal counsel at the commitment proceedings. Certification by relatives and physicians that a person is mentally ill is not sufficient reason to confine him. The ruling is retroactive; it is estimated that thousands of persons now in mental institutions were not represented by attorneys at their commitment proceedings. This ruling applies only to the 10th U.S. Circuit, which includes Wyoming, Colorado, Utah, Kansas, northern and eastern Oklahoma, and New Mexico, but the decision undoubtedly will be cited in cases in other jurisdictions.

Disability Claims for Psychoneurotic Reaction

The U.S. Sixth Circuit Court of Appeals recently reversed a decision by a Social Security Administration examiner who denied disability benefits to a claimant suffering a psychoneurotic anxiety reaction.

The examiner denied the benefits because the disability was not established by medical, clinical, or laboratory evidence; the claimant was not motivated to work; and anxiety reactions are not included under emotional disorders in any of the appropriate statutes.

The psychiatrists and physicians testifying at the original hearing all agreed that the claimant suffered from a psychoneurosis that was permanently disabling.

The Court of Appeals held that "expert opinion" was all that was necessary and that the examiner was required to accept the uncontested opinion of expert witnesses; that lack of motivation to work was itself a symptom of psychoneurosis according to expert opinion; and that the emotional conditions cited in the statutes are examples only, not a complete catalog.

Vermont's Mental Health Law

Vermont's new mental health law, enacted by the 1968 General Assembly, provides many changes in mental health procedures. The law not only stipulates that involuntary patients have right to counsel, but other rights of patients are detailed concerning disclosure of information, wrongful hospitalization, notice of hospitalization, appeals, humane care and treatment, restraints, communication and visitation, civil visits, and visits by the clergy and attorneys. There are provisions for change of status from an involuntary to a voluntary basis as well as requirements for administrative, medical, and judicial review of a patient's status.

The law provides for four methods of admission to mental hospitals: Under *voluntary admission* any person 16 years of age or over capable of making a responsible application may be admitted for diagnosis, care and treatment.

There are two procedures for *involuntary admission;* the usual procedure calls for an application by an "interested party" after which the proposed patient is examined by one physician who must certify that he is of the opinion that the person

is mentally ill and should be hospitalized. The application and certification are sent to the probate court, which after a hearing may order hospitalization. In the second procedure for involuntary admission the steps are similar except that if the examining physician expressed the opinion that the person presents a "substantial risk" of injury to himself or others, and needs immediate custody or care, the person may be admitted immediately, and the hearing is held after admission.

The fourth procedure permits *emergency admission* if certification by a physician is not available and the person presents such a serious problem that there is a reasonable belief that he poses an immediate risk of substantial injury to himself or others if not restrained. A police official on a mittimus issued by a magistrate may take the person to a hospital for admission; if, after examination by the hospital staff, the person is found not to be mentally ill or in need of hospitalization, he is returned by the police official to the place from which he was taken.

1968 Mental Health Legislation in Michigan

Changes in the Community Mental Health Services Law—One Act amends the Law so that the legality of a city-county board in Wayne County is not in question, and writes a new definition of mental health programs more in keeping with the concept of comprehensive services. The Act formerly provided that community clinics must come under the local mental health board by contract or administration within four years; now the Director of the Department of Mental Health has authority to extend the four-year period for a reasonable time. The Department's rule-making authority is changed so that program priorities and minimum numbers and scope of services and activities of community mental health board programs may be prescribed by rule. Also, the Department must consult with psychiatric directors of local programs in establishing standards for professional personnel.

Another act establishes a procedure for a small county to join or contract with an existing board in an adjacent larger county.

Repeal of the Criminal Sexual Psychopathic Act.—The legal category of criminal sexual psychopath was abolished.

The 48-Hour Detention Order and Residency Requirements—The Hospital Act for Mentally Diseased Persons was amended to make clear that a police officer, with permission of the prosecuting attorney, may confine a mentally ill person in a hospital, home, or other place, not just a jail. It also eliminates the requirement that certifying physicians must be residents of the State.

Commitment of Certain Prisoners to State Hospitals for the Mentally Ill—Corrections Department's statutes were amended to provide that the Department of Corrections before releasing certain adult prison inmates shall obtain a clinical mental evaluation from the Center for Forensic Psychiatry, and also to petition the probate court for commiting such persons to a State hospital.

Fees from Sheltered Workshops—An act allowing a Department hospital to keep fees collected in sheltered workshops in the hospital and to use the fund to purchase

supplies and equipment and to pay patients.

Minnesota's Hospitalization and Commitment Act

A 9-page pamphlet has been prepared outlining some of the provisions of the Minnesota Hospitalization and Commitment Act which became effective in 1968. It describes the patients' rights during hospitalization; hospitalization procedures; discharge, release, and transfer procedures; and ways of obtaining aftercare.

It may be obtained from the Medical Services Division, Department of Public Welfare, Centennial Office Building, St. Paul, Minn. 55101.

Chromosome Defect as Defense

Recent studies have shown that chromosomal abnormalities seem to be more prevalent in certain groups of men convicted of crimes than in the general male population. These findings may lead attorneys to use chromosomal anomalies as a defense in some cases on the grounds that the defendant is not responsible for his acts.

In Australia an accused murderer was acquitted on these grounds, but in a trial last fall in France, the defendant was found guilty by the jury. Both cases are likely to become precedent setting.

Mental Health News Digests

Conference on Mental Health in the Americas

About 100 mental health professionals from North, South, and Central America attended the first working conference on mental health in the Americas in San Antonio, Texas, on December 4-8, 1968. Conducted under the auspices of the Inter-American Council of Psychiatric Associations, the conference was a first step toward establishment of a mechanism to further international collaboration.

Two years of planning and preparation went into the conference—every member had a job to do, thus the name "working conference"—and 35 advance papers were written on the six agenda topics of resources, needs, education, research, patterns of utilization, and planning and administration.

Some of the recurring themes of the conference were:

Clinical services for the mentally ill are woefully inadequate throughout the Americas.

Mental health problems cannot be separated from social-economic-political problems.

Steps must be taken to facilitate international collaboration through such possible mechanisms as regional mental health centers throughout the hemisphere; exchange of students and faculties; an "international clearinghouse for mental health information"; and development of common nomenclature and definition of terms.

A "national institute of mental health" with an advisory council of professionals and citizens may be a good pattern to promote mental health programs in any nation.

Broadening the education of the psychiatrist and his coworkers in behavioral science generally would be desirable.

The discussions and recommendations of the conference will be published in a report now in preparation.

The Behavioral Sciences and the Federal Government

The Advisory Committee on Government Programs in the Behavioral Sciences of the National Research Council has urged that the Government make better use of the knowledge and methods of disciplines concerned with behavior and social institutions in making complex decisions in many areas such as urban problems, foreign affairs, public health, and civil rights. And the Government should take more responsibility for the development of the behavioral sciences.

Besides a broadening of interest in the behavioral sciences in both the Office of Science and Technology and the President's Science Advisory Committee, the report recommends more emphasis by the National Science Foundation on grants in the behavioral sciences.

It also recommends establishment of a National Institute for Advanced Research and Public Policy "to undertake continuing and long-range analyses of national policies and problems, to serve as a center for continuing interchange between Government policy-makers and scientists, and to provide a forum in the Nation's Capital for the full growth and application of knowledge from all sciences to the major issues of the society."

Copies of the report, *The Behavioral Sciences and the Federal Government,* are available from the Printing and Publishing Office, National Academy of Sciences, 2101 Constitution Avenue, Washington, D.C. 20418, for $3.50.

Narcotic Addict Rehabilitation Act Developments

A total of 1684 narcotic addicts were committed for examination and evaluation under the Narcotic Addict Rehabilitation Act during its first 20 months of operation, ending January 31, 1969. Of the 1684, 900 were committed for treatment, 190 were currently being evaluated, and 594 had been discharged.

The total number included 68 addicts charged with a criminal offense who were civilly committed under the provisions of Title I in lieu of prosecution, 392 addicts convicted of a crime who were sentenced to treatment under Title II, and 1224 addicts not charged with any criminal offense who were civilly committed under Title III. Over 90 percent of the Title III commitments were initiated by the addict himself. Title III permits addicts to request commitment to treatment in the Federal program if State or local treatment facilities are not available.

Addicts sentenced to treatment under Title II are being treated in special facilities and aftercare programs developed by the Bureau of Prisons. Treatment and rehabilitative programs for addicts civilly committed under Titles I and III have been developed by the National Institute of Mental Health. Examination and hospital treatment have been provided at the NIMH Clinical Research Centers at Fort Worth and Lexington. When suitable State and local facilities have been developed, these services will be contracted for as close as possible to the addict's community.

Aftercare and rehabilitative services have been developed for addicts committed to the NIMH program in 58 cities. Local agencies render services to the addicts under contract to NIMH. As of January 31, 1969, there were 256 patients in aftercare in the NIMH program and 80 patients on parole in the Bureau of Prisons' program.

Under Title IV of the Act, in 1968 grants totaling nearly $3.6 million were awarded to support six new comprehensive community-based treatment centers for narcotic addicts in Chicago, Philadelphia, St. Louis, New York, New Haven, and Albuquerque.

Support of Behavioral Sciences at the NIMH

For many years the National Institute of Mental Health has been committed to large-scale support of research and training in the behavioral sciences. With the growing interest in the behavioral sciences, the NIMH is planning to underline and strengthen its total extramural effort in the behavioral sciences. Included will be expanded programs in social and cultural factors influencing behavior, studies of group and individual behavior, biological factors influencing behavior, as well as more research on such "basic" processes as thinking, perception, learning, memory, motivation, and language.

Eli A. Rubinstein has been appointed Assistant Director for Extramural Programs and Behavioral Sciences, to coordinate this increased effort. Raymond J. Balester has been designated as Deputy.

New Members of the National Advisory Mental Health Council

Three new members of the National Advisory Mental Health Council appointed in fiscal year 1969 for four-year terms are Dr. Bernard Holland, Professor and Chairman of the Department of Psychiatry at Emory University; Mrs. Jacob K. Javits of New York City; and Charles I. Schottland, Dean of the Florence Heller Graduate School for Advanced Studies in Social Welfare at Brandeis University.

Prognosis for the Mentally Ill

Psychoneuroses and psychoses respond best to treatment of four types of illnesses resulting in total disability, according to a study by the Metropolitan Life Insurance Company. In a survey and followup of illnesses among its employees for the years 1957–61, it was found that mentally ill men had a recovery rate of 28 percent and mentally ill women, 32 percent. For diseases of the circulatory system the recovery rate was only 12 percent for men and 17 percent for women.

International Control of Drugs

The Commission on Narcotics of the United Nations has now prepared two drafts of a proposed treaty for control of psychotropic drugs and circulated them to member governments. The drugs include tranquilizers, amphetamines, barbiturates, and hallucinogens. One draft is quite similar to earlier international treaties; stringent control measures would be applied and the drugs covered would be decided by the International Commission on Narcotic Drugs. The second draft is also similar except that the Commission, on recommendation of the Director General of the World Health Organization, would request

governments to apply various control measures, and the request would be binding unless a government rejected it within a certain time.

A meeting of the Commission will be held during 1969 to decide which of the two drafts to accept.

Emotional Reactions to Political Events and Crises

The Committee on Social Problems of the American Psychoanalytic Association has begun a research project, in collaboration with a political scientist, to collect data on the way in which individuals react to major political events and crises, e.g., the assassination of Senator Robert Kennedy. Data will be collected from the actual analyses of patients, and studied in an attempt to learn about the behavior of individuals in relation to political situations. The first situation studied was the national election in November 1968.

Two groups of practicing analysts are collaborating by observing reactions of their patients to specific political events and to unexpected crises.

Dr. Robert Dorn is chairman of the Committee on Social Problems, and Dr. Aaron Esman, a member of the Committee and Director of Training at the Jewish Board of Guardians in New York City, is working on the study with Dr. Arnold A. Rogow, Graduate Professor of Political Science at the City University of New York.

Expanded Rehabilitation Services in Kansas

Among other programs, the rehabilitation services in Kansas mental hospitals are being expanded. The hospitals are furnishing offices and training activities and the Kansas Division of Vocational Rehabilitation is furnishing staff and supervision.

Under this new program, the project at the Osawatomie State Hospital was the first to get underway. The hospial had a sheltered workshop where patients could get prevocational training, and the shop has had several subcontracts for industry. The Vocational Rehabilitation Project will now assist in preparing patients for outside jobs, such as clerical, typing, and business machine operation. The hospital itself provides an excellent setting for such service-type jobs as custodial, kitchen help, sanitation, horticulture, floriculture, auto mechanics, home management, and office practices.

At Topeka State Hospital four vocational rehabilitation counselors have been assigned to the adult patient sections. Much of the training will be centered at the hospital coffee shop, which is ideal for training food service workers for which there is a great need.

A new project at the Larned State Hospital is a three-phase program: an admission team goes over the patients' records to determine the feasibility of giving training and evaluation; if feasible, the decision is implemented; the third step is job placement and followup service on the job.

Case Aide Program

The Mental Health Case Aide Program at Metropolitan State Hospital in Waltham, Mass. is a pilot project cosponsored by the Mystic Valley Mental Health Association and the Mental Health Association of Central Middlesex with the hospital's cooperation.

Case Aides are mature women volunteers who work several hours a week under professional supervision on a one-to-one basis with chronic hospitalized mental patients to aid their resocialization and adjustment to life outside the hospital.

Not only is the program an important service to patients, but it also provides an opportunity for women to use their experiences in living for meaningful service. As such, it is a significant bridge between the hospital and community. A Family Care Program also has been initiated at the hospital to provide foster homes for many of the patients who were able to leave the hospital after participating in the Case Aide Program.

Helpline

"Helpline" in Sussex County, Delaware, is a 24-hour free service co-sponsored by the Mental Health Association of Delaware, Sussex County Levy Court, Sussex County Mental Hygiene Clinic, and clergy of all faiths throughout the county. Begun in the spring of 1968, its purposes are to provide an around-the-clock information and referral service, including suicide prevention service. During the regular work week, Helpline calls are answered at the Mental Hygiene Clinic; during other hours the calls are handled by volunteers who have received training for such service. Volunteers are primarily members of the clergy and social workers.

One feature of the service is an arrangement with radio stations to provide brief "spots" about the service, such as, "Helpline is a free psychiatric emergency service for Sussex County residents. When *you* need help—call [number]" or "In time of severe emotional distress, remember Helpline is here to help *you*. Call [number] for free, confidential help."

Services for Adolescent Patients

A program of services for adolescent patients has been started at St. Vincent's Hospital of St. Louis. Admission to the program will be through St. Vincent's Medical Staff.

Three major services of the program will be an outpatient diagnostic and evaluation service; 24-hour emergency service; and short-term treatment service or program with a 90-day limit. A fourth service of the program, to be added later, will be day care, which will permit the patient to spend the day in school at the Hospital and nights at home.

Referral of patients to the program will be from individuals and social agencies. The program will be staffed professionally by private psychiatrists, psychologists, and psychiatric social workers. A full complement of adjunctive therapies, including a continuing education program, will be available.

Decision to establish the program was made after a survey of 3,500 physicians in Missouri and the southern half of Illinois. The survey included general practitioners, neurologists, adult and child psychiatrists, pediatricians, and internists. These medical specialists are most apt to be called upon to treat adolescent emotional problems in the absence of hospital outpatient facilities.

The program will initially accommodate 15 adolescents, with an additional five beds being held in reserve on a 24-hour emergency basis to deal with critical situations that

cannot await the ordinary admission routine.

Diagnostic and treatment facilities available will include: individual and group psychotherapy; clinical laboratory service; a general physical examination; consultation in all the medical specialities; family therapy; assessment of academic standing and potential; evaluation of social and interpersonal skills; continuing education; educational therapy; nursing service; and occupational and recreational therapy.

Adolescent patients will be located on a separate unit and not dispersed among the general hospital population. This decision was based on the need for a special therapeutic environment for adolescents.

Professional staffing of the unit will be designed along the team approach, rather than the traditional chain-of-command approach, where each therapist works only within his speciality. The nurse will not be a nurse as such, but a cotherapist. She may function as a teacher on occasion, or as an occupational therapist, whatever the demands of the situation call for. The aggregate skills of all workers on the unit will be applied to each patient according to his needs.

The educational portion of the program will be supplemental to the school program from which the patient comes. It will aim at coaching the student to enable him to keep pace with his class during the hospitalization period. The program will also attempt to strengthen the pupil's academic potential which, due to his illness, may not have been fully realized before becoming a patient.

Dr. S. R. Banet is Medical Director at St. Vincent's Hospital; Sister Rose Anthony is Administrator; and Mr. William T. Sparrow, a psychiatric social worker, is coordinator of the new program.

Training Correctional Workers To Diagnose and Treat Delinquents

People who work with criminals and other social problem groups are learning a recently developed method for diagnosing and treating delinquents. The project, now in its second year, is conducted at the Institute for Study of Crime and Delinquency in Sacramento by personnel from the California Youth Authority.

The training is based on a new treatment model that has attracted national attention among workers in delinquency. Developed in the California Youth Authority's Community Treatment Project, the "Differential Treatment Model" defines nine subtypes of delinquents and prescribes specialized treatment for each of the various subtypes. The program emphasizes the use of different treatment environments within foster homes, group homes, and living units in institutions for specific kinds of offenders.

Those trained include administrators, treatment supervisors, institutional workers, probation and parole agents, delinquency prevention workers, law enforcement officers, school counselors, and others.

During the first eight months of the program, 208 persons were trained in 18 sessions that lasted one week or longer. Many of these trainees are now training other personnel. Project Director is Dr. Marguarite Warren.

Task Force on Systems Planning

Pennsylvania has established a Task Force for Systems Planning

for improved exchange of clinical and research information in the State mental health system.

The mission of the Task Force is to apply the principles and methods of systems analysis and general systems research in the preparation of a long-range program that will coordinate statewide clinical, research, and training activities of the Office of Mental Health into a program which will not only interpret clinical problems to the research scientist and research findings to the clinician, but also both clinical and experimental knowledge to professional and paraprofessional personnel who are undergoing training within the mental health system.

An important aim of the Task Force will be to maximize and evaluate the information available for administrative decision making, and thus enhance the planning of future state mental health programs.

The Task Force is to be headed by Dr. Harold A. Rashkis.

Regional Center For Addicts in New York City

A regional center for research in the treatment and rehabilitation of narcotic addicts has been established in New York City. The center is attached to the New York Medical College.

The new Regional Center for Studies in Substance Use will provide clinical and preventive services to the East Harlem and Yorkville Sections of Manhattan. It will also assist other areas and communities in planning treatment and prevention programs and will train personnel to work in the area of drug abuse.

Dr. Richard E. Brotman is director.

International Drug Information Center

An international referral system for information on psychotropic drugs has been established within the National Institute of Mental Health, in cooperation with the World Health Organization.

Part of NIMH's Psychopharmacology Research Branch, the new International Reference Center for Information on Psychotropic Drugs will coordinate the dissemination of psychotropic drug information to the national and international scientific community. Alice A. Leeds, M.D. will head the new center.

Similar centers will be established in other nations and on the regional level to form a World Health Organization reference network. The NIMH International Center will coordinate that network. Three regional centers, in Asia, Africa, and Europe, have already been established under the auspices of WHO. Two more regional centers are planned, one for South America and one for Australia.

One of the center's responsibilities is the development of guidelines for the collection and compatible processing of psychotropic drug information and a periodic review of the coverage and adequate translation of the journal literature.

The center will use the *Psychopharmacology Bulletin* as its regular means of communicating with the scientific community. A publication of the NIMH National Clearinghouse for Mental Health Information, the *Bulletin* publishes previously unreported psychopharmacology research.

Conference on Minority Group Education for Social Work

The problem of recruiting and

training students from minority groups for social work was the subject of a one-day conference at the University of Texas, December 16, 1968.

Deans of the four Texas Schools of Social Work met with representatives from the National Institute of Mental Health, Hogg Foundation, and the Council on Social Work Education to explore ways in which more potential talent within minority groups can be developed and channeled into social work careers.

Currently very few Negroes or Spanish-surnamed Americans are being trained in schools of social work or hold social work positions in Texas, in spite of the increasing minority group population. In San Antonio, where 40–50 percent of the population is Mexican-American, there are only 24 social workers in this ethnic group with master's degrees.

Few minority group members appear aware of the possibilities in social work careers, or of opportunities available at universities for training in this area for which many have special skills. Nor are counselors in public schools aware of these opportunities. In fact, well-meaning "realistic" public-school counseling of minority students encourages them to take low paying jobs instead of trying for college.

Among the points made at the conference were:

Information about opportunities in social work should be imparted to minority group youngsters from elementary school level upward, and efforts made to screen potential talent and encourage continuation of schooling.

Standard achievement tests and the graduate record examination discriminate against the disadvantaged, especially Mexican-Americans. Ways must be found to provide early training for the disadvantaged whose competence should be explored through other than the standard tests.

The addition of black faculty members to schools of social work would give impetus to recruitment, and would enrich and make more relevant the curricula.

Junior colleges should be encouraged to develop curricula to train social work technicians.

Minority group members should be used for recruitment among their own ethnic groups.

Opportunities to work in social agencies as aides should be broadened for minority group personnel, since such exposure enhances awareness of career opportunities in this field.

Efforts might be made to recruit as potential graduate students psychiatric social work aides in mental hospitals.

Persons might be recruited for graduate education who may be new to social work but experienced in minority cultures.

Special recruitment efforts might be directed at Negro colleges.

Dr. Milton Wittman, Chief of the Social Work Training Branch, National Institute of Mental Health, chaired the conference.

Community Action Program in Denver

One of the oldest sections in Denver, the Near West Side, was a neighborhood in decline: there were few new housing projects, nearly one-third of the existing housing was deteriorating or dilapidated and, in some areas, as many as 52 percent of the families lived on less than $3,000 a year.

Yet the residents of this inner-city area were able to check deterioration of their neighborhood when given a chance through the Community Organization Project, operated by the Auraria Community Center. The area is now part of the model cities program of the Department of Housing and Urban Development.

The Auraria project was set up

to develop citizen participation in solving neighborhood problems and in creating a stable neighborhood; to promote the use of community resources such as mental health services counseling, recreation, and social programs; and to assist in developing a feeling of community involvement.

Physical improvement was the first and main concern. A clean-up program, which got under way early in the project, resulted in improving hundreds of homes and demolishing many vacant, dilapidated buildings. An old, unused fire station, which was a community eyesore as well as a hazard, was razed after two years of combined citizens' efforts. Another aspect of the clean-up project involved an area-wide building code enforcement program to improve housing conditions. Youth Corps and people on welfare were involved working in construction and other jobs to bring the buildings up to standard.

A community newspaper was started, initially as a means of publicizing the housing code enforcement program, but also as a means of communicating other neighborhood services and activities. The *West Side Recorder,* one of the most outstanding successes of the five-year project, carried news of achievement by local residents (such as school awards), activities of various organizations and agencies, and educational features such as recipes, health education, and information about community affairs. Volunteers helped collect the news and distribute the newspaper. One resident, praising the *Recorder,* said: "It lets you know what is going on so you can 'holler' about it."

Investigators found that the more people knew about services offered, the more they used them. For example, soon after residents discovered they could petition for mid-block street lights, such installations were made in many blocks of the area. Not all projects were as "localized." Citizen participation included action on city-wide problems such as junk cars left on private property—a problem that plagued a middle-class area as well as the blighted one.

A recently completed report concluded: "Improvement in the physical and social environment, through cooperation with other residents of the local area, is a logical and valid approach to beginning involvement of citizens who have had little experience with participation in change-oriented programs."

Director of the project was Earl McCoy.

Training Clergymen in Problems of Alcoholism

A series of training programs for clergymen in problems of alcoholism is underway at Pacific School of Religion, Berkeley, Calif.

The goal, in addition to stimulating interest in the field of alcoholism, is to teach clergymen how to counsel problem drinkers and their families. Clergymen completing one of the program's courses will also be able to conduct community education programs in alcoholism.

Twenty trainees will participate in a postdoctoral program of advanced course work and supervised research and clinical experience. A second course will consist of annual two-week institutes for 30 practicing clergymen with leadership potential. Emphasis will be on intensive study and supervised train-

ing, and the participants will receive academic credit and certificaton.

The third part of the program will focus on alcohol problems through annual three-day faculty seminars. These will provide training in teaching techniques for nearly 50 clergymen. Program officials hope the faculty seminars will encourage theological seminaries to include in their curricula topics related to alcohol and its problems.

Trainees will be clergymen and students from Bay Area seminaries in Berkeley, formally known as the Graduate Theological Union. Herman J. Kergel is program director at the Pacific School of Religion.

Housewives as Mental Health Workers

Mature women whose children are grown are learning to rehabilitate mentally ill patients. Eight carefully selected housewives, up to 55 years of age, are being trained each year to become mental health rehabilitation workers in an experimental program at Albert Einstein College of Medicine in New York. With supervision, the housewives help socially disabled patients readjust to community living after a period of hospitalization. They work with the patients individually, in families, or in groups, giving them continuous assistance and moral support. The training project, now in its third year, has been very successful. As team members, the trainees have brought fresh approaches to difficult cases. Their work with geriatric mentally ill patients has been particularly impressive.

Graduates of the program are now serving in a variety of jobs. Four are doing rehabilitative work at a community health center and three are coordinators in an experimental ward at a State hospital. One directs social and activity groups at a day treatment center, and another leads supportive group psychotherapy and participates in schizophrenia research at a medical college. Others function in similar roles, providing much-needed mental health services in the community.

The Project Director is Dr. Ida Davidoss.

Community Mental Health Center Program for Agency Workers

A training program to help public agency workers avoid developing "tunnel vision" toward their work is underway at the Temple University Community Mental Health Center.

By acquainting paraprofessional workers from community agencies with the basic concepts of mental health and of community mental health services, project officials are providing these workers with a new perspective into problems they encounter in their agency work. New perspectives are resulting in new solutions, previously considered by many of these workers to be outside their agency's concern.

The program's general aim is to improve collaboration between community agencies and the Temple Community Mental Health Centers so that the needs of the low-income area served by both will be better met.

To increase their knowledge in the mental health field, agency workers are trained in personality development, emotional adjustment, deviant behavior, and referral processes. A psychiatrist, psychologist, and social worker conduct the training. Representatives of other

medical specialties also conduct classes from time to time to give the program flexibility and to broaden its outlook.

Now in its fourth year, the program has given training to 121 representatives from the Board of Education of Philadelphia, the State Board of Parole, Catholic Social Services, Opportunities Industrialization Center, Pennsylvania State Employment Service, Philadelphia County Board of Assistance, Philadelphia Department of Public Welfare, Philadelphia Department of Recreation, and the Probation Office of Philadelphia.

Initially, trainees met 15 times a year for two years, a total of 45 training hours. Now, after evaluation of the first two years of the program, the training sessions have been condensed into one year.

Project officials plan to prepare a training manual based on their findings and experiences so that other communities may adopt the program. The project director is Dr. Stanton Selzer.

Training Program for Urban Planners

Professional city planners will learn how to design more socially acceptable cities in a new training program at Florida State University in Tallahassee. Because U. S. cities are changing so rapidly, there is an urgent demand for planners who can adapt physical environments to social needs. To help meet the demand the Florida State graduate school will supplement its urban planning curriculum with a master's specialty in social planning management. The present curriculum includes specialty in urban design, regional planning, transportation planning, or administration and policies planning.

In the new specialty, additional courses will teach planners how to design cities that will better meet people's social and psychological needs. Students will take courses on social planning, social psychology, social welfare and policies and other subjects. During the first year students take courses on urbanism and planning theory, methods, and practice. The following summer they receive field training in a metropolitan planning agency or in the office of a mayor or city manager. The second year, they specialize in one of the areas mentioned above.

Dr. Edward McClure is the Project Director.

Backyard Play Centers

Backyard play centers for two-year-olds and special instruction for their mothers are the basis of a project launched by a group of educators at the University of Florida in Gainesville to break the cycle of educational poverty in lower socioeconomic communities.

The goal of the project is to try to answer the question: how and when can the young child best be helped to overcome the limitations of his environment?

The program consists of three phases: development of new educational materials at the university's Early Childhood Curriculum Lab, training of special parent and child educators, and use of materials and educators in home learning centers.

The most effective place to help the child is home and the most effective person to do the job is the mother. Consequently, the program focuses on teaching the mother how to stimulate the child's intellectual and psychological growth through the use of appropriate toys, play

techniques, and reading—activities taken for granted in average middle-class homes, but generally totally lacking in poor, uneducated families.

The key to the program's operation is the "parent educator," a person from the same environment as the mothers and children, who is given special training in child development. The parent educator works with the mother in the home, demonstrating educational techniques and stressing the importance of communicating with the child. In cases where the mother is unable to read to the child, the parent educator will assume this job for her.

In the expanded program the parent educator will become director of backyard centers to be set up at homes of participating families. She will be in charge of a small group of two-year-olds who will be brought to the center twice a week for special instruction and activities. Mothers whose homes are used for backyard centers will be actively involved as assistants to the center director.

Sessions with the children will be complemented by once-a-week individual meetings with the children's mothers.

The program stresses the importance of involving members of the community. The need for outside professional help will be significantly reduced as the community is able to meet its own needs. For this reason the parent educator is given a great deal of responsibility. She spends three days a week working with the children plus two days in training, learning how to use new materials and how to teach small children.

A measure of the success of the current programs is the fact that the State of Florida has established the job category of "child development trainer" based on the parent educator model.

The program is designed to enhance the mother's self-image and followup evaluations will be made to determine the effects of participation on her attitudes and activities.

Dr. Ira Gordon is Project Director.

Mental Health Developments in New Hampshire

The biennial report of the New Hampshire Department of Health and Welfare describes mental health developments in the State for the past two years. The Division of Mental Health has responsibility for treatment, care, and rehabilitation of mentally ill and mentally retarded individuals. In the Director's office are the Coordinator of Community Mental Health Services, Bureau of Family Care, and the Office of Mental Retardation.

During the past few years, the community mental health services have expanded considerably. The legislature increased the appropriations for community mental health grants-in-aid eight-fold, from an appropriation of $75,000 in 1965 to $600,000 in 1968. In fiscal year 1967 about 5,000 children and adults received direct diagnostic and/or treatment services, an increase of 42 per cent over the previous year; and about 6,500 patients received direct services in 1967–68.

During fiscal 1967 and 1968, 15 voluntary nonprofit organizations received State grants for community mental health services. Five were newly established agencies: Lake

Region Mental Health Center, Laconia; Carroll County Mental Health Service, North Conway and Wolfeboro; Monadnock Family and Mental Health Service, Keene; Sullivan County Mental Health Clinic, Claremont; and Opportunity House, Concord. The first four of these agencies are outpatient mental health clinics, and Opportunity House is New Hampshire's first halfway house for the mentally ill.

New Hampshire's first comprehensive community mental health center—the Dartmouth-Hitchcock Mental Health Center—opened in July 1968. Located in Hanover, it is affiliated with Dartmouth Medical School and the Mary Hitchcock Memorial Hospital. In addition to an expanded outpatient department, the Center provides a 28-bed inpatient service, day treatment facilities, and a 24-hour emergency service.

For the future, it is proposed to establish an Office of Community Mental Health Services to plan, develop, and administer the community-based mental health services. Another goal is to establish a network of comprehensive mental health centers. Increased emphasis during 1970 and 1971 will be placed on consultative and inservice training services for nurses, police, physicians, clergy, and the general public through the combined efforts of the Division of Mental Health and the local mental health agencies.

The New Hampshire Hospital, the State's only public inpatient psychiatric hospital, was considerably changed during the past two years, both in terms of improved patient care and administrative streamlining.

At the Hospital, the Therapeutic Education Program serves hospitalized children and adolescents to prevent young patients from getting out of step with their peers, both educationally and socially. The program provides education in a therapeutic setting, as well as other services such as swimming and day camping at the Concord YMCA. The Psychiatric Vocational Rehabilitation Program, which has full responsibility for employment of patients, has developed training programs for secretarial workers, housekeeping, and hotel workers; it also administers a new sheltered workshop.

Community Mental Health Programs in Georgia

Three new community mental health programs were launched in Georgia in late 1968, bringing the total in the State to nine. Long-range plans call for 31 community programs to work with the 9–10 State-operated regional hospitals now open, under construction, or planned. The three new programs—in DeKalb county, North Fulton, and Gainesville—will provide emergency services, partial hospitalization, consultative services, educational services, and aftercare services.

The $1.5 million DeKalb project, being funded by Federal and local matching funds, will include a comprehensive mental health center to be constructed as an addition to DeKalb General hospital.

The North Fulton community mental health center, an addition to the Northside General Hospital now under construction, will also be funded by Federal and local monies. Some 25 beds will be reserved for inpatient psychiatric

services at the hospital, which will also offer outpatient services, partial hospitalization, and emergency care. Aftercare services, a child guidance clinic, and emergency referral services will be provided through the Fulton County Health Department, and the center will work closely with other county health resources.

The Gainesville mental health center, sponsored jointly by the Hall County Health Department, Hospital Authority of Hall County, and the City of Gainesville will provide services to 13 northeast Georgia counties. The project will be financed by Federal mental health funds, a local bond issue, Appalachian funds and other local sources, and will construct a 30-bed psychiatric unit at the Hall County Hospital and provide a range of community-based mental health services. Six of the 13 counties most distant from Gainesville will operate a satellite facility in Toccoa to offer outpatient care to residents of these counties.

Mental Health Traveling Seminars

The International Community Mental Health Seminars, a nonprofit organization, will sponsor three seminars to be held in Europe during the summer of 1969. These are designed to familiarize American specialists with programs in European community mental health practice.

Information may be obtained from: International Community Mental Health Seminars, c/o National Association for Mental Health, Room 1300, 10 Columbus Circle, New York, New York 10019.

Regional Directors for Mental Health and Mental Retardation in Pennsylvania

Pennsylvania has appointed its first State Mental Health and Mental Retardation Regional Director, Dr. Charles H. Palm. The position involves responsibility for administering the Mental Health and Mental Retardation Act of 1966 in Human Services Region I. This region includes the city of Philadelphia and Bucks, Chester, Delaware and Montgomery Counties.

The new regional director also will be responsible for directing the development of regional operational plans and budgeting and the application of departmental policies in program operations within the region. He will provide leadership in the development and coordination of public and voluntary resources to the needs of the mentally disabled at the community level, coordinating State and local services.

Behavior Modification in Chronic Patients

Dixmont State Hospital in Glenfield, Pa., is currently involved in a specialized treatment program employing behavior modification through "token economy" in order to effect change and adjustment in the individual. In the special environment of the HIP (Hospital Improvement Program) Cottage, 23 chronic schizophrenic patients are undergoing this treatment and rehabilitation.

Although the actual treatment program has not been underway long enough to show long-term concrete results in treatment and rehabilitation, the staff and patients have already gone through the first phase, and the forms in which

the patients' attitudes of anger and resistance is expressed can be described with accuracy.

The token system introduced at Dixmont, not only involved a novelty to the hospital at large, but is a radically different treatment program for patients. Initially, patients and relatives were inclined to view with alarm and suspicion the patients' transfer to the HIP Cottage. Since HIP is regarded as a treatment program rather than research, patients were not consulted about the move to the cottage and their requests for transfers back to the main building were not granted. Initially, patients were uncomprehending and angry. Where was the traditional treatment—love and comfort? Statements like, "This is a hospital not a penitentiary," "You make one sicker," or "I cannot stand this kind of pressure!" were common.

In the program, there were these and even more concrete expressions of anger and resistances. Tokens were occasionally found torn or stuffed in the commodes. Surprisingly, there were few other signs of resistance. In general, anger was expressed in brief impulsive acts for which a person almost immediately apologized. There were and still are attempts to bend the rules. Stealing and hoarding immediately developed as resistance to the token program, but both are on the decline.

No increase in general destructiveness was noted. There was *not* a mass revolt, series of attacks, or barrage of abusiveness heaped on the staff. There were some individuals who did complain to the authorities. One brought his objections directly to the Superintendent, behavior which was revealingly symptomatic of the patient's own disturbances.

Patients continue to request transfers from the Cottage to other wards at Dixmont, as well as hospitals in West Virginia, Italy, or just home—anyplace away from the token system. Their reasons center around the fact that they didn't have to work for anything in the Main Building and can't imagine anybody demanding that they assume such responsibility for themselves anywhere else in the world. They have learned that if you want something you can get it by being "sick." The simple things of life, three meals a day, picnics, movies, dances, TV, have already been free, and the fact that no work has been attached to these gratifications and privileges has been a repeated association for these chronic patients. When these requests or demands for transfer are made, the person is told, emphatically, "I know that it's a lot harder up here for you and that you now have to earn these things, but you cannot go back down the hill. The only way that we expect and want to see people leaving the HIP Cottage is by earning their way out of the hospital."

The project is directed by Dr. Irvin Guyett.

National Medal of Science Winner for 1968

B. F. Skinner, professor of psychology at Harvard University, was one of the 12 scientists to receive a National Medal of Science, the Federal government's highest award for distinguished achievement in

science, mathematics, and engineering.

Plans for Art Therapy Association

Forming an art therapy association was the topic for discussion by about 50 art therapists at a meeting at Hahnemann Medical College in December 1968. A committee was elected to survey existing art therapy practices and qualifications of those now working in the field. Later a statement of purpose, constitution and by-laws, and a slate of officers will be formulated.

Those interested in these plans should write to Mrs. Myra Levick, Director, Art Therapy Program, Hahnemann Medical College and Hospital, Community Mental Health Center, 314 North Broad St., Philadelphia, Pa. 19102.

Library on Suicidology

A basic "library" on suicidology, consisting of 10 books, 12 pamphlets, a playscript, and reviews of recommended films, is now available. Several authorities on suicide prevention reviewed and evaluated the current literature from which the final selections for the library were made.

The materials are assembled in a packet, which is available for $40 from the Mental Health Materials Center, 419 Park Ave. South, New York, N.Y. 10016.

European Brain and Behaviour Society

European scientists working in the field of neurosciences are proposing the establishment of a new organization, "European Brain and Behaviour Society." There is now no organization for the exchange of information in the neurosciences area, and as a result European scientists meet and discuss their work most often at meetings held in the U.S.—a costly and infrequent procedure. A study group is meeting early in 1969 in Rotterdam to define the purposes of the society and to elect the first members. Persons interested in the proposed society may write to Dr. A. Cowey, Institute of Experimental Psychology, South Parks Road, Oxford, England.

Trans-International Psychosomatic Seminars

The ninth educational cruise for TIPS (Trans-International Psychosomatic Seminars) to go to the South Pacific is now being planned. Those interested should write to Dr. James L. McCartney, Director of TIPS, Box 1309, Westhampton Beach, N.Y. 11978.

Marihuana Bibliography

"An Interim Guide to the Cannabis (Marihuana) Literature" has been published by the Addiction Research Foundation. Prepared by Oriana Josseau Kalant, the bibliography includes a heterogenous group of references as well as a brief overall historical perspective on the literature and a statement about the character and effect of Cannabis. Free copies may be obtained from the Addiction Research Foundation, 344 Bloor Street West, Toronto 4, Ontario, Canada.

Overcoming Chronic Disabilities

"The Patient's Role in Overcoming Chronic Disabilities" is a report of the 1968 Rehabilitation Workshop held in May 1968 in New York City. It was sponsored by the New York Metropolitan Regional Medical Program and the New York City Regional Interdepartmental Rehabilitation Committee, 40 Worth St., New York, N.Y. 10013.

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two new special reports

Two National Institute of Mental Health special reports have just been published and are now available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

First U.S. Mission on Mental Health to the U.S.S.R., a report on mental health services, training, facilities, and psychiatry and the law in the Soviet Union—members of the delegation: Dr. Stanley F. Yolles, Dr. Walter E. Barton, Mr. Mike Gorman, Judge David L. Bazelon, Dr. Alan D. Miller, Dr. Phillip Sirotkin, Dr. Harold M. Visotsky. 181 pages, PHS Publication No. 1893, price $3.50.

Mental Health Program Reports No. 3, describes representative research, training and services conducted or supported by NIMH. 460 pages, price $2, PHS Publication No. 1876.

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